

A text book of KAYA CHIKITSA



As per
updated
syllabus
of CCIM
New Delhi



Dr. Tajagna Dalsaniya

INDEX

Sr. No	Topic	Page no.
	PART A	3
1.	Derivation of the terms 'Kaya', 'Chikitsa' and their definitions and synonyms. Definition of 'Kayachikitsa, Definition of 'Bheshaja'. Types and detailed description of Bheshaja and Chikitsa, Knowledge about Chikitsa Chatuspada, Rogi Roga Pariksha Siddhantha, Astasthan Pariksha.	4
2.	Importance of Kriya Kaala according to stages of Dosha and their management.	17
3.	Chikitsa sutra and Management of vridhhi (increased) and kshaya (decreased) of Dosha, Dhatu and Mala, Ojo Vyapat (Kshaya, Visramsa and Vyapat) and its management. Chikitsasutra and Management of Sama-Nirama states, Roga-Anutpattikara Chikitsa, Roga Prashamana Chikitsa (Doshapratyanika, Vyadhipratyanika, Ubhayapratynika), Doshopakrama, Chikitsa sutra and Management of Sthanantara Dosha (Ashayapakarsha, Anuloma/Pratiloma gati of Dosha, Vimarga gamana of Dosha), Knowledge of Lina Dosha & its management, Diagnosis, Chikitsa Sutra and Management of Avarana and of Dhatu Pradoshaja diseases, Importance of Dosha, Dushya , Bala, Kaala, Agni, Prakriti, Vaya, Sattva Satmya, Desha, Ahara and stage of diseases in treating them. Chikitsa Sutra and Management of 'Samanyaja and Nanatmaja' diseases.	20
4.	Detailed description of Dvividhopakrama (Santarpana and Apatarpana) and Shadavidhopakrama (Rookshana, Snehana, Swedana, Sthambhana, Langhana and Brimhana). Detailed description of Shodhana, Shamana and Nidana Parivarjana. Knowledge of Aushadha matra, Sevan kaala and Anupana, Definition and Knowledge of Pathya-Apathya with examples of diseases of various systems.	45
5.	Derivation of the term 'Manas', its sthana (place), Guna (qualities) and Karma (functions). Samanya Chikitsa Siddhanta of Manasa Roga.	62
6.	Principles & Management of Nutritional deficiency disorders.	66
7.	Management of Vardhakyajanita vikara, Indriyapradoshaja vikara, Alzhiemer's Disease, Sleep disorders, General debility.	69
8.	General introduction and principles of Management of diseases produced by Genetic, Environmental, and Iatrogenic factors. Disorders due to drug and Food allergy and their management and other allergic conditions.	76

INDEX

Sr. No	Topic	Page no.
	PART B	85
1.	Detailed description of Chikitsa Sutra and Management of Jwara and its types. Etiopathogenesis & relevant Ayurvedic and Modern management of following types of Fevers-Typhoid, Pneumonia, Pleurisy, Influenza, Mumps, Meningitis, Encephalitis, Tetanus, Yellow fever, Plague, Dengue Fever, Chikun Guniya, Leptospirosis, Viral Fever, Anthrax, Masurika (Small pox), Laghu Masurika (Chicken pox), Romantika (Measles).	86
2.	Chikitsa sutra and Management of the diseases of Rasavaha Srotas such as – Pandu, Amavata, Madatyaya, Hridroga, Hridshoola, Hypotension, Hypertension, Anaemia, Rheumatoid arthritis.	119
3.	Chikitsa sutra and Management of the diseases of Raktavaha Srotas such as - Raktapitta, Kamala, Kumbhakamala, Halimaka, Daha, Mada, Murcha, Sanyasa, Vatarakta, Plihadosha, Yakrut dosha, Haemolytic disorders, Hepatitis, Cirrhosis of Liver, Leukaemia, Kushta, Shvitra, Visarpa, Sheetapitta, Udarda, Kotha and Kshudra Roga.	132
4.	Knowledge of National Health Programmes and the relevant Ayurvedic Management of the following diseases enlisted by World Health Organisation- Malaria, Filariasis, Kala Azar, Leprosy, Tuberculosis, AIDS.	157
5.	Introduction of general principles of maintenance of health and management of diseases of following systems of Medicine- Yoga, Naturopathy, Unani, Siddha, Physiotherapy and Rehabilitation.	162
6.	Diseases of different Endocrine Glands- such as Thyroid, Parathyroid, Pituitary, Pancreas and Adrenal glands and their management.	168
7.	General introduction, types and Management of diseases caused by Vyadhi Kshamatwa Hinata (Immuno deficiency disorders), Auto Immune Disorders.	175
8.	Description and Management of following Emergency Conditions- Acute Haemorrhage, Hypertensive Emergencies, Acute abdominal pain (Renal colic, Biliary colic, Gastritis, Pancreatitis, Peritonitis and Appendicitis), Acute Abdomen, Anuria/ Oliguria, Congestive Heart Failure, Myocardial Infarction/Angina, Shock, Syncope, Convulsions, Hyperpyrexia, Hyperglycaemia, Hypoglycaemia, Status Asthmaticus, Acute Respiratory distress Syndrome, Drowning and Electric shock.	178

KAYA CHIKITSA

PAPER 1

PART A

1. Derivation of the terms 'Kaya', 'Chikitsa' and their definitions and synonyms. Definition of 'Kayachikitsa', Definition of 'Bheshaja'. Types and detailed description of Bheshaja and Chikitsa, Knowledge about Chikitsa Chatushpada, Rogi Roga Pariksha Siddhantha, Astasthan Pariksha.

KAYA

Definition:

चीयतेन्नादिभिः इति कायः ।

The term 'kaya' means nourishment and building up of the body with ingested food.

चीयते प्रशस्तदोषधातुमलैरिति कायः ।

Kaya or the body forms dosha, dhatu, and mala after assimilation of food.

कायः चितप्रकृतिः ।

Kaya is constitution of mind.

Synonyms:

अथः कलेवरं गात्रं वपुः संहननं शरीरं वर्ष्म विग्रहः ।

कायो देहः क्लीवः पुंषो स्त्रीयां मूर्तिस्तनुस्तनु ॥

कलेवर → Kaya is that which develops from best shukra.

गात्र → Means which moves continuously.

वपु → Which brings the seeds of actions of other life.

संहनन → That provides compactness to the body.

शरीर → That which undergoes destruction continuously.

विग्रहः → That which receives sukha and dukha.

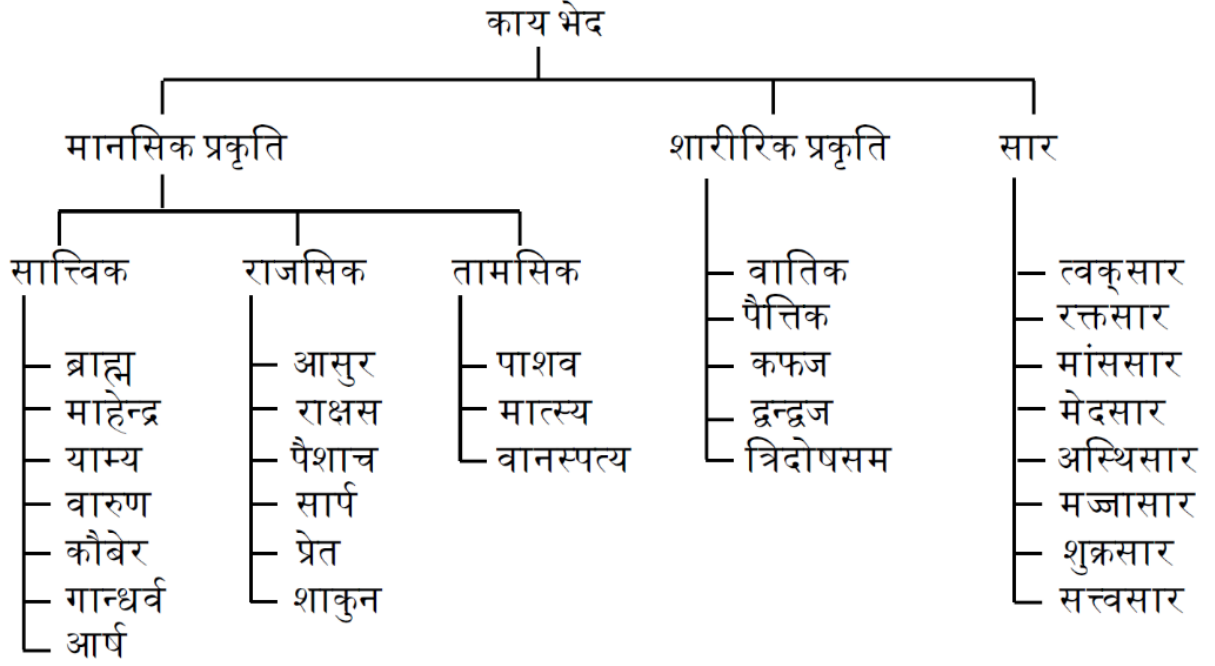
देह → That which grows continuously.

क्लीव → That which has capacity to copulate.

पुरुष → Male

स्त्री → Female

तनू → That which grows and expands with proper nourishment.

**CHIKITSA****Definition:**

कित् निवासे रोगापनयनेन चिकित्सति ।

Chikitsa is that which removes the disease.

चिकित्सा रुक् प्रतिक्रिया ।

Chikitsa is action against pain.

चिकित्सा रोगनिदान प्रतिकार ।

The action which is against the roga nidana.

चिकित्सा तत्प्रतिकारः ।

Chikitsa is that which resists disease.

या क्रिया व्यधिहरणी सा चिकित्सा निगध्यते ।

The action which removes the disease is called as chikitsa.

चतुर्णां भिषगादीनां शस्तानां धातुवैकृते प्रवृत्तिर्धातुसाम्यार्था चिकित्सेत्यभिधीयते॥

(Cha. Su. 9/5)

Employment of all the excellent four – physician etc. – in case of disorder of dhatu with the objective of (re-establishing) their equilibrium is called “Therapeutics”.

According to the modern science treatment is the care and management of a patient to combat diseases.

Synonyms:

चिकित्सितं व्याधिहरं पथ्यं साधनमौषधम्।

प्रायश्चित्तं प्रशमनं प्रकृतिस्थापनं हितम्॥३॥

विद्याद्भेषजनामानि,...॥४॥

Chikitsa (measures which alleviate disorders), vyadhihara (destroyer of diseases), pathya (beneficial for the bodily channels), sadhana (instrument for therapeutic actions aushadha (that which is prepared of herbs), prayashchitta (expiriation), prashamana (pacification), prakritisthapana (that which helps recovery to normalcy), hita (wholesome) – these are the synonyms of bhesaja (therapeutics).

KAYA CHIKITSA

Definition:

कायचिकित्सा नाम सर्वाङ्गसंश्रितानां व्याधीनां ज्वररक्तपित्तशोषोन्मादापस्मारकुष्ठमेहातिसारादीनामुपशमनार्थम् | (Su. Su. 1/8)

Kayachikitsa is a branch of astanga ayurveda which deals with treatment of the different diseases like jvara, raktapitta, sosha, unmada, apasmara, kushtha, meha, atisara etc.

कायस्यान्तरग्नेश्चिकित्सा कायचिकित्सा | (Cha. Su. 30/28 Chakrapani)

Treatment of the jatharagni is called kayachikitsa.

BHESHAJA

Definition:

भेषं रोग भयं जयति भेषजम् | (Amarkosha 2/6/50)

Which removes fear of disease is called as bhesaja.

तदेव युक्तं भैषज्यं यदारोग्याय कल्पते | (Cha. Su. 1/134)

That is the right medicine which makes for health.

TYPES OF CHIKITSA

1. Ekavidha chikitsa:

Nidana parivarjana: Removal of the cause of disease is a summarized treatment.

2. Dvididha chikitsa:

- Sheeta chikitsa & Ushna chikita
- Santarpana & Apatarpana chikitsa
- Shodhana & Shamana chikitsa
- Urjaskar & Rogaghna chikitsa
- Rashayana & Vajikaran chikitsa
- Rodaprashama & Apunarbhav chikitsa
- Dravyabhuta & Adravyabhuta chikitsa

3. Trividha chikitsa:

a. Daivavyapashraya chikitsa:

Divine or spiritual therapy.

The divine medication consists in incantation of herbal amulets, magical stone, auspicious sacrificial offerings, oblations, vows, purificatory ritual, fasting, propitiatory invocation, salutation and such other things.

b. Yuktivyapashraya chikitsa:

Scientific therapy consists of the prescription of the line of dietetic regimen and medication.

c. Satvavajaya chikitsa:

Mental control consists of restraining the mind from the desire for unwholesome objects.

- a. Antah parimarjana chikitsa: Internal administration of medicines.
- b. Bahir parimarjana chikitsa: External application of medicines.
- c. Shastra pranidhan: Shastrakarma or surgery.

- a. Hetu viparita chikitsa: Opposite to etiology
- b. Vyadhi viparita chikitsa: Opposite to disease
- c. Ubhayarthakari chikitsa: mixed approach

Apakarshana:

- a. Langhana: fasting or use of light foods such as peya, vilepi, mudgayusha. For those patients who have alpa dohsa / bala.
- b. Pachana: Along with langhana or upavasa, use of digestants such as chitraka, musta, trikatu etc. For those patients who have madhyama dosha / bala.
- c. Doshavasechana: Purificatory procedure for elimination of the aggravated dosha. For those patients who have balwaan / bahu dohsa.

Krimi

- a. Apakarshan: Expulsion of unwanted things that means to take out or remove by force.
- b. Prakruti vighata: It means to break the pathogenesis of disease by means of either external application or internal medicine.
- c. Nidana parivarjana: Avoiding the etiology factors of the disease.

4. Chaturvidha chikitsa: By sushruta

- a. Sanshodhana: Purification therapy
- b. Sanshamana: Palliative therapy
- c. Ahara: Dietetic regimen
- d. Achara: Good conduct of body, mind & speech

5. Panchavidha chikitsa: By charaka

- a. Vamana
- c. Anuvasana basti
- e. Nasya
- b. Virechana
- d. Niruha basti

6. Shadvidha chikitsa: (Shadvidha upakrama by charaka)

- a. Langhana
- c. Rukshana
- e. Swedana
- b. Brimhana
- d. Snehana
- f. Stambhana

7. Saptavidha chikitsa: (Shamana chikitsa)

- a. Pachana
- d. Trishna
- g. Vyayam
- b. Dipana
- e. Atapa sevana
- c. Kshudha
- f. Maruta sevana

8. Astavidha chikitsa: (Shastra karma by sushruta)

- | | | |
|------------|-------------|--------------|
| a. Chedana | d. Vedhana | g. Visravana |
| b. Bhedana | e. Esana | h. Seevana |
| c. Lekhana | f. Aaharana | |

9. Dashavidha chikitsa: (Langhana chikitsa)

- | | | |
|-----------------|-----------------|------------------|
| a. Vamana | e. Pachana | i. Maruta sevana |
| b. Virechana | f. Upavasa | j. Vyayama |
| c. Niruha basti | g. Pipasa | |
| d. Nasya | h. Atapa sevana | |

10. Astadasha chikitsa: (Upashaya)

Aushadha	Anna	Vihara
Hetu viparita	Hetu viparita	Hetu viparita
Vyadhi viparita	Vyadhi viparita	Vyadhi viparita
Hetu-vyadhi viparita	Hetu-vyadhi viparita	Hetu-vyadhi viparita
Hetu viparitarthkari	Hetu viparitarthkari	Hetu viparitarthkari
Vyadhi viparitarthkari	Vyadhi viparitarthkari	Vyadhi viparitarthkari
Hetu-vyadhi viparitarthkari	Hetu-vyadhi viparitarthkari	Hetu-vyadhi viparitarthkari

CHIKITSA CHATUSHPADA

The prognosis of any disease – whether the disease is easily curable, difficult to cure or incurable – depends upon its nature and the healthy combination of the four factors required for the successful treatment.

- The physician
- The medicine
- The attendant
- The patient himself

भिषग्द्रव्याण्युपस्थाता रोगी पादचतुष्टयम्।

गुणवत् कारणं ज्ञेयं विकारव्युपशान्तये॥ (Cha. Su. 9/3)

Physician, medicine, attendant (nursing staff) and the patient, these are four components which, all in their best of qualities are responsible for the complete cure of disease.

1. Bhishak:

श्रुते पर्यवदातत्वं बहुशो दृष्टकर्मता।

दाक्ष्यं शौचमिति ज्ञेयं वैद्ये गुणचतुष्टयम्॥ (Cha. Su. 9/6)

A vaidya should possess the qualities such as proficiency in theoretical knowledge (that is learnt), extensive practical experience, dexterity and purity (of body and mind).

2. Dravya:

बहुता तत्रयोग्यत्वमनेकविधकल्पना।

सम्पच्चेति चतुष्कोऽयं द्रव्याणां गुण उच्यते॥ (Cha. Su. 9/7)

Abundance (in availability), efficacy (with good pharmacological properties), various pharmaceutical forms and intact qualities of drugs – these are four qualities of the ideal medicine.

3. Paricharaka:

उपचारज्ञता दाक्ष्यमनुरागश्च भर्तरि।

शौचं चेति चतुष्कोऽयं गुणः परिचरे जने॥ (Cha. Su. 9/8)

Knowledge of taking care of patient (nursing) as well as preparation, dispensing and administration of medicines and healthy recipes, dexterity, affectionate towards patient and purity of body and mind – these are four qualities of attendant.

4. Rogi:

स्मृतिर्निर्देशकारित्वमभीरुत्वमथापि च।

ज्ञापकत्वं च रोगाणामातुरस्य गुणाः स्मृताः॥ (Cha. Su. 9/9)

Good memory (to remember treatment guidelines), obedience (to follow given instructions), fearlessness (courage to face adversities of disease) and ability to provide all information about the disease – these are the qualities of patient.

ROGI-ROGA PARIKSHA SIDDHANTA

Examination of the patient and disease is essential for the proper diagnosis so that the disease can be treated successfully.

Rogi pariksha:

The patient should be examined first and then the disease.

Examination of the patient can be done by following method.

1. Trividha chikitsa:

- Darshana:** Inspection – Direct observation of the patient
Varna, Rukshata, Glani, Akriti, Vairupyata etc. observed and measured by darshana pariksha.
In pandu paleness is known by this examination.
- Sparshana:** Palpation
Body temperature, Palpitations, Tenderness, Organomegaly, Feeling of extra growth etc. are examined by sparshana pariksha.
In dakodara – On percussion dull note is heard and feeling like water in leather bag.
- Prashna:** Interrogation (History taken)
To know the nidana, agni, kosta, prakriti, vata etc.
To develop and maintain doctor and patient relationship.

2. Panchavidha pariksha: Pancha gyanendriya

- Chakshurindriya pariksha: Prakruta & vikruta varna, chhaya, pramana, etc.
- Twakendriya pariksha: Prakruta & vikruta varna, sheetata, ushnata etc.
- Shrotrendriya pariksha: Antrakunjana, sandhi sphurana etc.
- Rasnendriya pariksha: Prakruta & vikruta gandha
- Ghranendriya pariksha: Prakruta & vikruta gandha

3. Shadvidha pariksha:

a. to e. pancha gyanendriya chikitsa

f. Prashna pariksha: Interrogation

By interrogation one should ascertain the desha, kala, jati, satmya of the particular individual likings, dietary habits, causative factors of the diseases, pathogenesis of the diseases, agni, kostha, proper evacuation of the vata-mutra-purisha and chronic stage of the disease of patient.

One should arrive at a diagnosis by correlating the local signs and symptoms with similar features of other disease on the basis of scientific principles involved.

4. Astavidha pariksha:

रोगाक्रान्तस्य शरीरस्य स्थानानि अष्टौ निरीक्षयेत् ।

नाडी मूत्रं मलं जिह्वां शब्दं स्पर्शं दृकाकृति ॥

a. Nadi pariksha:

Examination of radial pulse

1 cm below wrist joint of right hand of male patient or left hand of female patient with the help of first three fingers of physician.

Examine the rate, rhythm, volume, tension, force of the pulse, and identify the vata, pitta & kapha pulsation at the index, middle and ring fingers respectively.

Physician should do nadi pariksha for 3 times in a day, after feel the nadi, physician should determine the disease by intellect.

Doshanusar / Roganusar nadi gatis are as follows.

- Vata prakopa → Jalauka or sarpa gati
- Pitta prakopa → kaak or manduka gati
- Kapha prakopa → Paravat or hamsa gati
- Vata-Pitta prakopa → Kinchita sarpa kinchita bheka gati
- Pitta-Kapha prakopa → Sarpa gati then hamsa gati means some time very fast then slow.
- Sannipataja → kaastha kutavat
- Asadhya → First pitta then vata, kapha, whose force become slow and very mild
- Jvara → Ushna, Vegavaan
- Kama-Krodha → Vegavaan
- Chinta-Bhaya → Ksheena
- Mandagni → manda gati

- Dhatu ksheena → Manda
- Truptanna → Sthira

b. Mutra pariksha:

For urine examination collect the sample of urine in early morning.

Following tests are done for examination

Frequency of micturition

Stream of urine while micturition

Density of urine

Quantity, smell, colour of urine

Presence of pus

Presence of calculus

Presence of semen

Taila bindu pariksha

Observation:

Vata → pandu varna, nila, ruksha

Pitta → Rakta varna, Pita, aruna

Kapha → Fenila, snigdha, pallava vari tulya

Dvandvaja → Mixed of two doshas

Sannipataja → Krishna varna

Raktaja → Snigdha, Ushna, Rakta

Ajirna → Like rice water

Nava jvara → Dhumra varna, excessive micturition

Taila bindu pariksha:

Urine sample was collected in early morning.

Avoid the first stream of urine then put one drop of oil in it and observe the direction of the taila bindu.

Direction → Result

East → Disease will cure immediately

West → Obtained health

North → Disease will cure definitely

South → Suffered from jvara.

Ishana → Patient will die within month

Agni / Nairutya → If hole found the certainly death

Vayavya → Death

c. Mala pariksha (Stool Examination):

The stool should also be examined like urine.

Following tests for examination.

- | | | |
|----------------|-------------|----------|
| • Malapravruti | • Gandha | • Aama |
| • Matra | • Saraktata | • Nirama |
| • Samhanan | • Sapuyata | |
| • Varna | • Sakrumi | |

Dosha → Lakshana

Vata → Sushka, fenila, ruksha

Pitta → Pita varna

Kapha → Sukla varna

Ama condition → Same like kapha

Ajirna → Apakva mala

Jalodara → White colour & very foul smelling

Tikshanagni → Sushka and pindita

d. Jihwa pariksha:

Tongue is examined for its varna, aakruti, ankura, liptata, sparsha, gati etc.

In agnimandhya → tongue becomes coated

In vata prakopa → Sheeta, ruksha, sphutita

In pita prakopa → Rakta, Shyama varna

In kapha prakopa → Sweta, Picchila

In tridosha prakopa → Krishna, Kantakayukta jihwa

e. Shabda pariksha:

Examination of the voice of the patient.

In vata prakopa → It becomes ruksha swara

In pita prakopa → It becomes teevra swara.

In kapha prakopa → it becomes gambheer swara

f. Sparsha pariksha:

Examination of skin of the patient.

In vata prakopa → it becomes sheeta & krishnavarna

In pitta prakopa → pitavarna & ushna twacha

In kapha prakopa → Aadra & swetavarna twacha

g. Drika patiksha:

Examination of eyes of the patient

Varna, panduta, pitata, raktata, shoka etc. should be examined.

In vata prakopa → eyes becomes ruksha, dhoomavarna

In pita prakopa → pita, dahayukta

In kapha prakopa → Snigdha, jala yukta

h. Aakruti pariksha:

Examination of body built of the patient.

Physique of the patient is examined on the basis of krisha, sthoola, samanya, atihreshwa, atideerga etc.

- Vata prakruti:

Hair: Dry, Rough & Dhusara varna

Talkative nature

Dislike excessive cold

Their dhriti, smriti, buddhi, gati are inconsiderable

- Pitta prakruti:

Excessive thirst & appetite

Gaura varna

Hair: pita, varna, less

Body: ushna

Adventurous nature

- Kapha prakruti:

Calm in nature

Intelligent

Sattvika

5. Dashavidha pariksha:

- a. Prakriti: constitution of the patient
- b. Vikruti: Strength of the disease
- c. Sara: dhatus of the best quality
- d. Samhanana: Compactness of the body
- e. Satmya: Habitual and suitable foods etc.
- f. Satva: Mental strength
- g. Pramana: Measurement of the body.
- h. Ahara shakti: Strength of digestive fire is examined in 2 ways viz.

Abhyavarana shakti: Intake capacity

Jarana Shakti: Digestive capacity

- i. Vyayama shakti: Strength of the patient is examined by his exercising or normal working capacity.
- j. Vaya: Age group of the patient.

6. Pramana pariksha:

Trividha pariksha: Aaptopadesha, Prayaksha, Anumana

Chaturvidha pariksha: Aaptopadesha, Pratyaksha, Anumana, Yukti

- a. Aaptopadesha pariksha:

Examination of the patient on basis of aaptavachana such as involvement of dosha-dushya, aggravating factors, how the disease is manifested, prognosis, complications, nomenclature of disease etc.

- b. Pratyaksha pariksha:
Direct observation of examination by sense organs like panchagyanendriya pariksha or darshana-sparshana pariksha etc.
- c. Anumana pariksha:
Examination of the patient with the help of inference.
e.g. examination of agni by observing pachana shakti
examination of bala by vyayama shakti
It helps to examine and diagnose those conditions which cannot be observed directly.
- d. Yukti pariksha:
The physician has to use his skill and specification of circumstances such as desha, kala, etc. to plan the treatment by observing all the tests and effect of treatment.

ROGA PARIKSHA

Roga pariksha plays important role in the diagnosis as well as treatment, with the help of nidana pachaka the disease is examined and then treatment is planned on the basis of bheda, bala, sadhyasadhyata etc.

Nidana panchaka:

- | | | |
|---------------|-------------|--------------|
| 1. Nidana | 3. Rupa | 5. Samprapri |
| 2. Poorvarupa | 4. Upashaya | |

These are called nidana panchaka because of their utility in the diagnosis and being 5 in number.

1. Nidana (Hetu):

The causative factors of the diseases are called nidana.

It has various synonyms such as hetu, nimitta, aayatana, karana etc.

It has various classifications →

- Two types →
- a. Bahya hetu e.g. Mithya ahara vihara
 - b. Aabhyanta hetu e.g. Dosha-dushya samurchana
 - a. Utpadaka hetu: produces disease directly
 - b. Vyanjana hetu: Aggravating factors of disease
 - a. Anubandhya hetu: Primary cause
 - b. Anubandh hetu: Secondary cause

- Three types →
- a. Asatmendriyarth samyoga: Improper use of sense organs
 - b. Pragyaparadha: Sinful acts
 - c. Parinama: Seasonal imbalance

- Four types →
- a. Sannikrushta hetu: nearest cause – such as dosha prakopa according to day, night, before & after food etc.
 - b. Viprakrushta hetu: distant or slow cause – such as kapha sanchaya in hemanta rutu is responsible for kapha prakopa in vasant rutu.

- c. Vyabhichari hetu: Weak cause – the etiological factors those produce disease when get favourable conditions.
- d. Pradhanika hetu: Powerful cause – such as poison that manifests disease immediately.

Importance →

Avoiding the etiological factors is the first line of treatment for all the diseases so nidana not only helps in diagnosis but also helps in prevention and treatment of disease.

2. Poorvarupa:

पूर्वरूपं प्रागुत्पत्ति लक्षणं व्याधे ।

Before complete manifestation of disease, the pre clinical symptoms of prodromal symptoms are called poorvarupa.

It has two types

- a. Samanya poorvarupa:
Jvara samanya poorvarupa – shrama, arati, vivarna, vairasya
- b. Vishesha poorvarupa:
Jvara vishesha poorvarupa - Jrimbha in vataja jvara
Nayanadaha in pittaja jvara
Annaanabhilasha in kaphaja jvara

Importance → At the stage of sthana samshraya, the prodromal symptoms arise and indicate the upcoming disease, so poorvarupa helps in diagnosis as well as prevention and treatment of disease at early stage.

3. Rupa:

व्याधे: स्वरूपम् व्यक्तं तद् रूपम् ।

Signs and symptoms of disease are called rupa.

It has two types →

- a. Samanya rupa: General symptoms of disease.
- b. Vishesha rupa: Specific symptoms of different types of disease – vataja, pittaja etc.

Importance →

For proper diagnosis the physician must have knowledge of clinical features of the disease.

4. Upashaya:

Therapeutic tests with use of relieving factors of the disease such as medicines, food & activities are called upashaya. The aggravating factors are called anupashaya.

Upashaya has 18 types →

Aushadha	Anna	Vihara
Hetu viparita	Hetu viparita	Hetu viparita
Vyadhi viparita	Vyadhi viparita	Vyadhi viparita
Hetu-vyadhi viparita	Hetu-vyadhi viparita	Hetu-vyadhi viparita
Hetu viparitarthkari	Hetu viparitarthkari	Hetu viparitarthkari
Vyadhi viparitarthkari	Vyadhi viparitarthkari	Vyadhi viparitarthkari
Hetu-vyadhi viparitarthkari	Hetu-vyadhi viparitarthkari	Hetu-vyadhi viparitarthkari

Importance → Both the upashaya & anupashaya helps in the diagnosis of goodha linga vyadhi (diseases of complex symptoms).

5. Samprapti:

The mechanism by which the doshas get vitiated and pathways through which they produce the disease are called samprapti / jati / aagati.

It has 6 types →

- a. Sankhya: Number of types of disease e.g. asta jvara, pancha gulma
- b. Pradhanya: Predominant dosha in particular disease denoted by tara, tama.
- c. Vikalpa: Anshansh kalpana or prakupita dosha that means the aggravated qualities of dosha such as guru – laghu, snigdha – ruksha etc.
- d. Bala: Strength of the disease
- e. Kala: Relation of disease with time variations such as day, night, seasonal changes, before and after food etc.
- f. Vidhi: Subtypes of disease other than number e.g. Urdhwaga & adhoga raktapita, nava jvara, punaravartaka jvara, mruda bhakshana janya pandu etc.

As the kriyakala also gives knowledge of pathogenesis of the disease, the shad kriyakala are also considered as types of samprapti itself.

Importance →

Treatment is nothing but to break the pathogenesis of the disease.

2. Importance of Kriya Kaala according to stages of Dosha and their management.

Disease is not a state; it is rather a process of changing manifestations, involving different stages. The physician must have knowledge of different stages of a particular disease for its prevention and cure. In Ayurveda, the different stages of the pathogenesis of diseases are described as kriyakala.

सञ्चयं च प्रकोपं च प्रसरं स्थानसंश्रयम् ।

व्यक्तिं भेदं च यो वेत्ति दोषाणां स भवेद्भिषक् ॥ (सु. सु. 21/36)

There are six stages of the pathogenesis →

- | | | |
|-------------|-------------------|-----------|
| 1. Sanchaya | 3. Prasara | 5. Vyakti |
| 2. Prakopa | 4. Sthanasamsraya | 6. Bheda |

Who has the knowledge of all these stages is called physician.

These stages (avastha) suggest the physician what action (kriya) should be taken to prevent or cure the disease, and that is why these are called kriyakala.

1. Sanchaya:

Dosha-vridhhi in its own place is called chaya.

Accumulation of doshas first takes place in their normal seats of predominance.

Mainly two types

- a. Svabhavika:
 - Naimitika (Rutu janya)
 - Avasthika (Ayu janya)
- b. Asvabhavika:
 - Asvabhavika
 - Asatmendriyarthasamyoga janya

As soon as this accumulation starts, it is reflected in the mind in the form of a desire for the qualities opposite to those of the particular dosha and the patient develops hatred for substances having similar qualities of the accumulated dosha.

Doshanushar lakshana:

Vata dosha sanchaya → Stabdhata, purnakosthata

Pitta dosha sanchaya → Pitta avabhashata, Mandoshmata

Kapha dosha snachaya → anga gauravta, aalashya

2. Prakopa (Aggravation of doshas):

‘विलयन रूपा वृद्धिः प्रकोप’ dosha vridhhi with its excitation or aggravation is called prakopa.

Doshanushar lakshanas:

Vata prakopa → Koshtha toda, vayu sancharan

Pitta prakopa → Amlodgara, pipasa, paridaha

Kapha prakopa → Aruchi, hrillash

Aggravation of doshas are of two types viz.

Chaya purvaka prakopa
Achaya purvaka prakopa

3. Prashara (Spread of aggravated doshas):

If the earlier stage is not treated, then the aggravated doshas expand and overflow just like starch with yeast, when soaked in water for overnight, it gets fermented and rises up in its vessel.

In prashara avashta the doshas start expanding, overflowing from their seats, and spreading to other parts of the body.

Doshanushara prashara lakshana:

Vata prashara → Vayu vimarga gamana, aatopa

Pitta prashara → Chosha, paridaha, dhumayana

Kapha prashara → Aruchi, Angasada, chhardi

There are 15 types of prashara of aggravated dosha.

4. Sthana samshraya (localization of the aggravated doshas):

The aggravated doshas circulating in all over the body during prashara avastha, if not treated properly, then advance to next stage and get settled or localized in a part of body, where they find favourable condition or vitiated srotas.

This stage of disease gives rise to prodromal symptoms. (Poorvarupa).

Prakupita dosha gets sthana samshraya in different locations producing different types of diseases.

e.g. Udara gata → Gulma, Vidradhi, Anaha etc.

Basti gata → Prameha, Ashmari, Mutradoshas etc.

Medo gata → Granthi, Apachi, Arbuda etc.

Pada gata → Shlipada, Vatarakta etc.

5. Vyakta (Manifestation of signs and symptoms of disease):

Later on dosha-dushya-samurchana gets completed and the complete manifestation of signs and symptoms of the disease takes place.

If the disease is not treated in purvarupa avastha it advances to roopa avastha.

e.g. Jvara lakshana → Increase body temperature

Atisara lakshana → Excessive passage of watery stool

6. Bheda (Chronicity or differentiation of disease):

After some time of the disease process continues then the disease becomes chronic, and the physician can differentiate the exact types of dosha vitiation.

If this stage is not treated properly, then complications may occur and disease becomes incurable.

Importance of kriyakala:

1. 'क्रियाकालो चिकित्सा अवसरः' the knowledge of stages of disease provides opportunity to prevent it in earlier stage or treat it properly.
2. Kriyakala helps to understand the progress of diseases as well as to plan suitable preventive measures.
3. If the physician skips the earlier stage due to any reason and disease progress to later stage, then also he can treat the disease and stop it to progress further with the help of kriyakala.
4. Different stages require different types of treatment measures those should be applied to the respective stages only →
 - a. Sanchaya avastha → Roga anushara chikitsa
 - b. Prakopa avastha → Hetu viparita chikitsa
 - c. Prasara avastha → Hetu viparita chikitsa
 - d. Sthana samshraya chikitsa → dosha & dushya chikitsa
 - e. Vyakta avastha → Vyadhi vishista chikitsa
 - f. Bheda avastha → Jirna vyadhi vishista chikitsa

3. Chikitsa sutra and Management of vriddhi (increased) and kshaya (decreased) of Dosha, Dhatu and Mala, Ojo Vyapat (Kshaya, Visramsas and Vyapat) and its management. Chikitsasutra and Management of Sama-Nirama states, Roga-Anutpattikara Chikitsa, Roga Prashamana Chikitsa (Doshapratyanika, Vyadhipratyanika, Ubhayapratyanika), Doshopakrama, Chikitsa sutra and Management of Sthanantara Dosha (Ashayapakarsha, Anuloma/Pratiloma gati of Dosha, Vimarga gamana of Dosha), Knowledge of Lina Dosha & its management, Diagnosis, Chikitsa Sutra and Management of Avarana and of Dhatu Pradoshaja diseases, Importance of Dosha, Dushya, Bala, Kaala, Agni, Prakriti, Vaya, Sattva Satmya, Desha, Ahara and stage of diseases in treating them. Chikitsa Sutra and Management of 'Samanyaja and Nanatmaja' diseases.

CHIKITSA SUTRA AND MANAGEMENT OF VRIDDHI AND KSHAYA OF DOSHA, DHATU & MALA

Samanya nidana of dosha-dhatu-mala kshaya

सर्वदा सर्वभावानां सामान्यम् वृद्धिकारणम् ।

हासहेतु विशेषश्च ॥

Indulgence in the foods & activities of similar qualities results in vriddhi, whereas the foods & activities of dissimilar qualities results in kshaya.

Dosha vriddhi kshaya lakshana avum chikitsa:

1. Vata dosha:

Vriddhi:

कार्श्यकाष्ण्योष्णकामत्वकम्पानाहशकृद्ग्रहान्।

बलनिद्रेन्द्रियभ्रंशप्रलापभ्रमदीनताः॥६॥

Kshaya:

लिङ्गं क्षीणेऽनिलेऽङ्गस्य सादोऽल्पं भाषितेहितम्।

संज्ञामोहस्तथा श्लेष्मवृद्धयुक्तामयसम्भवः॥१५॥

Vata upakrama:

Samanya chikitsa:

To maintain the health of a patient, the physician should increase the decreases dosha, or decrease the increased dosha to bring the equilibrium state of dosha, with respective treatment measures.

In case of vriddhi, the physician should use vishesha chikitsa → as the foods and activities of dissimilar qualities of dosha, dhatu and mala cause kshaya and bring it to normal state.

In case of kshaya, the physician should use samanya chikitsa → As the foods and activities of similar qualities of dosha, dhatu and mala cause vriddhi and bring it to normal state.

Vishesha chikitsa:

1. For vata vriddhi:

Snehana, swedana then after mridu samshodhana

Anuvasana & niruha basti

Nasya, Gandusha, Dhumapana

Shirobasti, abhyanga

Madhur-amlav-lavana rasa yukta ahara

Ushna-snigdha ahara

Vata shamaka dravya prayoga like tila taila, dashamula, rasna, eranda, nirgundi, bala, ashwagandha etc.

2. For vata kshaya:

Katu, Tikta, Kashaya rasa yukta aahara.

Ruksha, laghu, shita ahara

Ratri jagaran, vyayama, chinta

Vatavardhaka dravya prayoga like mudga, jangal mamsarasa etc.

2. Pitta dosha:

Vriddhi:

पीतविण्मूत्रनेत्रत्वक्क्षुत्तृड्दाहाल्पनिद्रताः।

पित्तम्-----|७|

Kshaya:

पित्ते मन्दोऽनलः शीतं प्रभाहानिः-----|

-----|१६|

Pitta upakrama:

Vishesha chikitsa

1. For pitta vriddhi:

Virechana & raktamokshana

Shita pradeha, parisheka, abhyanga

Madhura, tikta, Kashaya rasa ahara

Shita dravya sevana

Kshira & ghrita prayoga like panchatikta, Chandana, ushira, hribera, mukta, pravaala etc.

2. For Pitta kshaya:

Katu, amla, lavana rasa yukta ahara

Kshara, tikshana ushana virya dravya prayoga like tila, masha, kulattha, atasi, matsya mamsa trikatu etc.

Atapa sevana, vyayama

3. Kapha dosha:

Vridhhi:

-----क्षेष्माऽग्निसदनप्रसेकालस्यगौरवम्॥७॥

शैत्यशैत्यक्षथाङ्गत्वं श्वासकासातिनिद्रताः।

Kshaya:

-----कफे भ्रमः।

क्षेष्माशयानां शून्यत्वं हृद्द्रवः क्षथसन्धिता॥१६॥

Kapha upakrama:

Vishesha chikitsa:

1. For kapha vridhhi:

Svedana, vamanam shirovirechana prayoga.

Tikshna virechana

Vyayama, ruksha udvartana

Katu, Tikta, Kashaya, rasa yukta ahara

Tikshna, ushna, ruksha ahara

Kaphashamaka dravya prayoga like madhu, panchakola, trikatu, triphala, lavang, yavakshara etc.

2. For kapha Kshaya:

Madhura, amla, lavana, rasayukta, ahara

Guru, snigdha, picchil ahara

Shita virya dravya prayoga like navanna, godhuma, ikshurasa, ksheera, dadhi, anupa mamsa etc.

Diwaswapna

Vishrama

Harsh

Dhatu vridhhi kshaya lakshana:

Vridhhi:

Rasa:

रसोऽपि क्षेष्मवत्-----|८|

Rakta:

-----रक्तं विसर्पप्लीहविद्रधीन्॥८॥

कुष्ठवातास्रपित्तास्रगुल्मोपकुशकामलाः।

व्यङ्गाग्निनाशसम्मोहरक्तत्वङ्नेत्रमूत्रताः॥९॥

Mamsa:

मांसं गण्डार्बुदग्रन्थिगण्डोरुदरवृद्धिताः।
कण्ठादिष्वधिमांसं च-----|१०|

Meda:

-----तद्वन्मेदस्तथा श्रमम्||१०||
अल्पेऽपि चेष्टिते श्वासं स्फिक्स्तनोदरलम्बनम्।

Asthi:

अस्थ्यध्यस्थ्यधिदन्तांश्च-----|११|

Majja:

-----मज्जा नेत्राङ्गगौरवम्||११||
पर्वसु स्थूलमूलानि कुर्यात्कृच्छ्राण्यरूषि च।

Sukra:

अतिस्त्रीकामतां वृद्धं शुक्रं शुक्राश्मरीमपि||१२||

Kshaya:

Rasa:

रसे रौक्ष्यं श्रमः शोषो ग्लानिः शब्दासहिष्णुता।

Rakta:

रक्तेऽम्लशिशिरप्रीतिशिराशैथिल्यरूक्षताः||१७||

Mamsa:

मांसेऽक्षग्लानिगण्डस्फिक्ऽऽशुष्कतासन्धिवेदनाः।

Meda:

मेदसि क्षीणे कट्याः प्लीहो वृद्धिः कृशाङ्गता||१८|

Asthi:

अस्थन्यस्थितोदः शदनं दन्तकेशनखादिषु।

Majja:

अस्थनां मज्जानि सौषिर्यं भ्रमस्तिमिरदर्शनम्||१९||

Sukra:

शुक्रे चिरात् प्रसिच्येत शुक्रं शोणितमेव वा।
तोदोऽत्यर्थं वृषणयोर्मदं धूमायतीव च॥२०॥

Dhatu pradoshaja vikaras:**1. Rasa pradoshaja roga:**

- Asraddha → disinterestedness in everything.
- Aruchi → Dyspepsia
- Aasyavairasyam → Feeling of some abnormal taste.
- Arasajnata → Inability to realise taste of food
- Hrilasa → Nausea
- Gauravama → Feeling of heaviness of body.
- Tandra → Drowsiness
- Angamarda → Pains all over the body
- Jwara → Fever
- Pandu → Anaemia
- Srotorodha → Bronchospasm
- Klaibya → Impotence
- Saada → Extreme weakness
- Agni nasha → Emaciation
- Krisha angata → indigestion

Specific treatment:

रसजानां विकाराणां सर्वं लङ्घनमौषधं।

For disease caused by bad foods affecting rasa dhatu, langhana treatment should be adopted, such as fasting, exercise etc. which brings about lightness to the body.

2. Raktapradoshaja roga:

- Kustha → Skin diseases
- Visarpa → Erycepelas
- Pidika → Furunculosis
- Raktapitta → Haemorrhagic disorders
- Asrigdara → Menorrhagia & DUB
- Guda medhra paka → Proctitis
- Pleeha → Splenomegaly
- Gulma → Abdominal tumours
- Vidradhi → Abscess
- Neelima → Haemangioma
- Kamala → Jaundice
- Vyanga → Fungal infection of skin
- Tilakalaka → Capillary haemorrhages
- Dadru → Urticaria
- Charmadala → Patchy dermatitis
- Switra → Vitiligo
- Pama → Eczema
- Kotha → Allergic rash
- Rakta mandala → Subcutaneous haemorrhages

Specific treatment:

विधि शोणितिकेध्याये रक्तजानां भिषग्जितं ॥

Treatment of disease caused by the vitiation of rakta is describes in 24th chapter sutrasthana – vidhi shoniteeya adhyaya.

Jalauka prayoga, sira vyadhana

Arsenical compounds. Sariva, Manjishtha etc.

3. Mamsapradoshaja roga

- Adhimamsa → Excessive growth of muscular tissue
- Arbuda → Tumours & cancer
- Charma keela → Keloid
- Gala saluki → Ranula
- Gala sundika → Tonsillitis
- Pooti mamsa → Gangrene
- Alaji → Minor cartilaginous growth
- Gala ganda → Goitre
- Ganda mala → Lymphadenitis
- Upajihvika → Uvulitis

Specific treatment:

For muscle tissue disorders

Samshuddhi → Panchakarma purification treatment

Shastra karma → Surgery

Kshara karma → Application of kshara

Agnikarma → cautery treatment

4. Medopradoshaja roga:

- Atisthoulya → obesity
- Atisweda → Excessive sweating
- Aamagandha → Offensive smell of the body
- Kruchraswasa → Dyspnoea on exertion
- Krichra vyavaya → sexual weakness
- All mamsaja rogas → Muscular disorders
- Prameha poorva rupas like polyuria, polydipsia, burning sensation in hands, palms & feet.

Specific treatment:

अष्टौ निन्दितिकेध्याये मेदोजानां चिकित्सितं ।

The fat tissue disorder treatment is explained in 21st chapter of sutrasthana – Ashtau ninditeeya adhyaya.

Treatment protocol:

Sthaulyahara chikitsa

Silajit, guggulu, takra

Lasuna, kulattha, musta

Vyayama

5. Asthi pradoshaja roga:

- Adhi asthi → Exostosis
- Adhi danta → Extra tooth
- Danta vedana → Tooth ache
- Asthi shoola → Pain in bones & joints
- Vivarnata → Contusion
- Kesha roma nakha samsru roga → Diseases of hair, nails, moustache

Specific treatment:

अस्थ्याश्रयाणां व्याधीनां पञ्चकर्माणि भेषजं ॥

For diseases of bone tissue, panchakarma treatment especially basti with, ghee and bitter herbs is useful.

6. Majjapradoshaja roga:

- Parva vedana → Pain in small joints
- Bhrama → Vertigo
- Moorcha → Fainting
- Tamodarshana → Blurring the vision
- Aroomshika → highly inflamed swelling
- Parvaja pidikas → Ganglion cyst

Specific treatment:

वस्तयः क्षीरसर्पिसि तित्तकोपहितानि च ।

Vastikarma

Ksheera + Ghrita ana

Treated with tikta rasa dravyas

e.g., pancha tikta guggulu ghritam

7. Shukrapradoshaja roga:

- Klaibya → Impotence
- Aharshanam → Lack of libido
- Even if he gets a child, he will be impotent, alpayu, kurupa.
- His wife suffers from repeated abortions.

Specific treatment:

शुक्रसमुत्थानामौषधं स्वादुतिक्तक ॥

Sukra sodhana

Pancha karma

Vaajikarana chikitsa

Mala vriddhi kshaya lakshana:

1. Purisha:

Vriddhi:

कुक्षावाध्मानमाटोपं गौरवं वेदनां शकृत्।

Abdominal sounds and distension.

Kshaya:

पुरीषे वायुरन्त्राणि सशब्दो वेष्टयन्निव।

कुक्षौ भ्रमति यात्यूर्ध्वं हृत्पार्श्वं पीडयन् भृशम्॥२१॥

Air movement in gut in upward with gurgling, severe discomfort in the heart region and the sides.

Chikitsa:

Vridhhi chikitsa → malavirechaka & vibandhahra prayoga

Kshaya chikitsa → Yava, masha, kulmasha, shaka, dhanyamla aadi malavardhaka dravya prayoga

2. Mutra:

Vridhhi:

मूत्रं तु बस्तिनिस्तोदं कृतेऽप्यकृतसंज्ञताम्॥१३॥

Acute pain in bladder and feeling of incomplete emptying after urination.

Kshaya:

मूत्रेऽल्पं मूत्रयेत्कृच्छ्राद्विवर्णं सास्रमेव वा।

Decrease in urine output, difficulty in urination and blood in urine.

Chikitsa:

Vridhhi → gokshuradi mutrala or mutravirechaniya dravya prayoga

Kshaya → Ikshurasa, Varuni manda, drava-madhura-amlavana mutravardhaka dravya prayoga

3. Sweda:

Vridhhi:

स्वेदोऽतिस्वेददौर्गन्ध्यकण्डूः-----।

Bad odour and itching

Kshaya:

स्वेदे रोमच्युतिः स्तब्धरोमता स्फुटनं त्वचः॥२२॥

Stiffness and loss of hair and breaking of skin.

Chikitsa:

Vridhhi chikitsa → pitta shamaka dravya, panchatikta ghrita guggulu prayoga

Kshaya chikitsa → abhyanga paschat swedana dravya prayoga.

OJO VYAPATA AND ITS MANAGEMENT

Ojas:

ओजस्तु तेजो धातूनां शुक्रान्तानां परं स्मृतम् ।

Ojas is the essence of formed of all the saptadhatu and it is formed after the sukradhatu.

It is also called chala or prakruta shleshma.

Oja sthana → Hridaya

Oja prakara → Para oja → Asta bindu pramana & hridaya gata

Apara oja → Ardha Anjali pramana & sarva shareera gata

Oja guna → गुरु शीतं मृदु शलष्णं बहलं मधुरं स्थिरं ।

प्रसन्नं पिच्छिल स्निग्ध ओजो दशगुण स्मृतम् ॥

Oja karma → प्राकृतस्तु बलं श्लेष्मा ।

Ojas is responsible for the natural strength of the body.

Its functions are → to nourish the body, to provide strength and immunity, to make voice and complexion pleasant, to support life by residing in hridaya pradesha. Loss of ojas leads to death.

Ojo dushti:

Nidana:

Ruksha & alpa ahara

Kshudha, ati-vyayama, swapna viparyaya

Chinta, krodha, shoka, bhaya

Dhatu kshaya

Abhighata

Jeerna vayu

Types:

There are three types of ojavaha sroto dusti viz.

1. Ojo visramas: Displacement of ojas from its normal.
2. Ojo vyapata: vitiation of ojas due to dusta dosha and dushya.
3. Ojo kshaya: Decrease of ojas in its normal quantity.

Ojo visramas lakshana:

Sandhi vishlesh (looseness of joints)

Gatra sadana (Weakness of body)

Dosha chyavana (Displacement of doshas)

Kriya sannirodha (Impairment of activities)

Ojo vyapada lakshana:

Stabdha guru gatrata (stiffness & heaviness in body)

Vata shoka (Swelling due to vata)

Varna bhedo (Discoloration or loss of complexion)

Glani (Exhaustion)

Tandra & nidra (Drowsiness and excessive sleep)

Ojokshaya lakshana:

Murcha (fainting)

Mamsa kshaya (Muscle wasting)

Moha (Unconsciousness)

Pralapa (Delirium)

Marana (Death)

Chikitsa:

In case of vitiation of ojevaha srotas, the physician should use hradhya & oho anukula vishesha kriya

Madhura, snigdha, sheeta virya, laghu, jivaniya gana, balya, rasayana, ojo vardhaka dravya prayoga

Nitya godugdha & goghrita sevana

Pathya ahara & Vihara sevana

Harsha & achinta

In ojo kshaya avastha:

Rasayana chikitsa is specific to improve ojas. After proper sodhana and snehana, swedana the rasayanas like chyavana prash, brahmi rasayana, siddha makaradhwaja, jeevaniya dravyas, ksheera, phala rasas etc. should be used.

The best way to improve ojas is brahma charya and achara rasayana (virtuous and pure code of conduct)

CHIKITSA SUTRA AND MANAGEMENT OF SAMA-NIRAMA STATES

Sama-Nirama status:

Aama:

Reduced digestive activities lead to production of improper formed or uncooked first dhatu. This undigested and harmful toxic waste product gets accumulated in stomach which is known as aama.

Aamadosha hetu:

- Aharaja → Abhojana, Ajeerna bhojani, Akala bhojana, Ati bhojani, Asatmya & Viruddha ahara sevana etc.
- Viharaja → Diwaswapna, Aalasya. Vegadharana etc.
- Mansika → Shoka, tamoguna pradhanata etc.
- Any nidana → Snehana mithyayoga
Vamana-virechana mithya yoga
Rutu vishamata

Aama lakshana:

Mala vishtambha, Stambha, Anga sadana, Sirah shula, jrimbha, anga marda, Trishna, chhardi, pravahika etc.

Aamaja roga:

Aalasibhut aama → alashaka

Vilambita aama → Vilambika

Urdhwa adha pravruta aama → Vishuchika

Drava Bahula aama → Atisara

Kapha pradhana aama → Aamajeerna & Pravahika

Pitta pradhana aama → Vidagdha jeerna, amlapitta, bhashmaka roga

Vata pradhana aama → Vishtabdhajeerna, Grahani roga

Shesh rasajanya aama → Rasashesha jeerna

When any element of the body is associated with aama, it will be called saama.

When not associated with aama.

Sama-Nirama samanya lakshana:

Saama dosha:

स्रोतोरोधबलभ्रंशगौरवानिलमूढताः॥२३॥

आलस्यापक्तिनिष्ठीवमलसङ्गारुचिक्लमाः।

लिङ्गं मलानां सामानां, निरामाणां विपर्ययः॥२४॥

Saama-Nirama dosha lakshana:

Sama vaata → Vibandha, agnimandhya, tandra, aantra kunjana, vedana

Nirama vaata → Vishada ruksha vayu, nirvibandha, alpa vedana, tvaka shyamata

Sama pitta → Durgandhi, harita shyama varna, amla, ghana, pitta, hriddaha

Nirama pitta → Tamra pitta varna, katu, asthira, vigandhi, balavardhaka pitta

Sama kapha → Aavila, Tantu, Durgandhi, Kshudha nashaka

Nirama kapha → Fhenavan, pandita, pandu, agandha

Sama-Nirama dhatu lakshana:

Sama dhatu lakshana → dhatu pradoshaja vikara

Nirama dhatu lakshana →

प्रीणनं जीवनं लेपः स्नेहो धारण पूरणे ।

गर्भोत्पादश्च धातूनां श्रेष्ठ कर्म क्रमात् स्मृतम् ॥

Aama chikitsa:

Apatarpana chikitsa is best for treatment of ama pradoshaja vikaras.
Acharya charaka has mentioned three types of apatarpana treatment.

अपतर्पणमपि च त्रिविधं - लङ्घनं पाचनं दोषावसेचनं चेति ।

1. Langhana:

Fasting, or use of light foods such as peya, vilepi, mudga yusha etc.

For those patients who have alpadosha or alpabala

2. Pachana:

Along with langhana or upavasha, use of digestant such as chitraka, musta, trikatu etc.

For those patients who have madhyama dosha or madhyama bala.

3. Doshavasechana:

Purificatory procedures for elimination of the aggravated dosha in those patients who are balawan or having bahudosha.

Aamadosha nashaka aushadha yoga:

- | | |
|------------------------|-------------------------|
| • Agnitundi rasa | • Shankha vati |
| • Ajeerna kantaka rasa | • Chitrakadi vati |
| • Panchakola churna | • Rasona vati |
| • Trikatu churna | • Dashamoolarista |
| • Lavanabhaskar churna | • Kumaryasava |
| • Hingwashtaka churna | • Dhanyapanchaka kwatha |
| • Ajamodadi vati | • Chitrakadi ghrita |

ROGA ANUTPATTIKARA CHIKITSA

Aayurveda prayojana:

प्रयोजनं चास्य स्वस्थस्य स्वास्थ्यरक्षणं आतुरस्य विकारप्रशमनं च ।

The aims of ayurveda are –

1. Prevention of disease
2. Cure of disease

To prevent the disease, physician should use roganutpatikara chikitsa (preventive treatment), and to cure the disease rogaprashamana chikitsa (curative treatment).

रोगानुत्पत्तिकर → रोग + अन् + उत्पत्ति कर

The treatment that prevents the occurrence of disease is called roga anutpattikara chikitsa.

It is preventive treatment which includes

1. Sadvruta palana
2. Swasthavruta palana
3. Rasayana vajikarana prayoga

1. Sadavruttha:

To follow good conduct and avoid the sinful acts.

2. Swasthavruta palana:

a. Dincharya palana:

To follow the daily regimen such as waking up in brahma muhurta than after shaucha karma – dantadhavana, jihwanirlekhana, Anjana, pratimarsha nasya, gandusha – kavala, dhumapana, abhyanga, snana, swachchha vastra dharana etc.

b. Ratri charya:

To follow night regimen such as avoiding the ahara, maithuna, nidra, Adhyayan in the evening. And to follow right methods of bhojana and shayana in the night.

c. Rutu charya palana:

To follow the seasonal regimen such as hemanta, shishira, Greeshma, varsha, sharada rutucharya

The physician should use seasonal purificatory procedures and advice regimens to avoid aggravation of respective doshas.

d. Yoga:

To practice yoga, asana, pranayama, dhyana etc.

3. Rasayana & Vajikarana prayoga:

Rejuvenatives & Aphrodisiac

ROGA PRASHAMANA CHIKITSA

The imbalance of dosha and dushya is roga.

Dhatuvaishamyata or dosha vaishmya is treated by application of rogaprashaman chikitsa.

The treat disease which is produced by dhatu vaishmyata, physician must bring dosha / dhatu samyata (i.e., equilibrium state of dosha and dhatu)

It is achieved by following measures

- a. Shodhana chikitsa (purificatory treatment)
- b. Shamana chikitsa (palliative or pacifying treatment)

Dosha pratyanka chikitsa in sanchaya, prakopa, prasara avastha:

e.g., Kampavata is due to the increased chala guna of vata, whereas pakshaghata is due to margaavarodha of vaata. Atikarshya is dry to rooksha and laghu gunas of vata. Thus, the physician must use his brain in treating the sama vata, but with three different gunas leading to three different dosha pratyaneeka dravyas.

Chikitsa:

Nidana parivarjana

Dosha shodhana-shamana

Dushya samavastha chikitsa

Srotoshodhana

Agni samavastha by dipana pachana

Hetu viparita chikitsa

Nanatmaja vikara chikitsa

i.g. vata hara → Taila-vastikarma, Eranda

Pitta hara → Ghrita, virechana, Usheera

Sleshma hara → Vamana, madhu, bhallataka

Vyadhi pratyanka chikitsa:

In vyakta & bheda avastha patient should treated with vyadhi pratyanka chikitsa.

Chikitsa:

Deva vyapashraya chikitsa

Satvavajaya chikitsa

Adravyabhuta chikitsa

Shalya chikitsa

Shamshaman chikitsa with rasa, bhasma, asava, arista etc.

Mahakashaya prayoga – like jwaraghna, kashaghna.

Dravya prayoga which work with prabhav like in krimija roga → Vidanga
In Kushtha → Khadira

e.g., jwara – musta, parpata

chhardi – Lajja

prameha – haridra

pandu roga – loha bhasma

pleeha roga – pippali

medo roga – guggulu

atisara – kutaja

Netra rogas – triphala

Ubhaya pratyanka chikitsa:

The physician should hit the disease from these both angles viz. dosha and vyadhi for effectiveness of treatment.

e.g., jwara + pittahara → shadanga paniya

grahani + kapha → kravyada ras

grahani + pitta → pravala panchamritta

arsha + raktapitta → kutaja

arsha + vatakaptha → bhallataka

kushtha + pitta → sariva

kushtha + kapha → bhallataka

DOSHOPAKRAMA

1. Vata dosha upakrama:

वातस्योपक्रमः स्नेहः स्वेदः संशोधनं मृदु ।

स्वाद्वम्ललवणोष्णानिभोज्यान्यभ्यंगमर्दनम् ॥

- Shodhana → snehana, Swedana, mrudu sanshodhana, niruha basti, anuvasana basti, snigdha – ushna basti, matra basti, nasya karma, dhumapana, shirobasti, gandusha etc.

- b. Shamana → abhyanga, mardana, veshtana, utsadana, upanaha, ushna parisheka etc.
- c. Ahara & aushadha → madhura – amla – lavana rasayukta, ushna & snigdha ahara, dipaniya, pachaniya, vatashamaka ahara, vrushya & balya dravya sevana, mamsa rasa, taila, godhuma, navanna, dashamula, rasna, Eranda, Nirgundi, arka, haridra, bala, ashwagandha, lashuna etc.
- d. Vihara → atapa sevana, ushna jala avagahana, pravara, mriga charma, vishmapana, vishmarana, hemanta rutucharya palana etc.

Among all above measures, niruha basti and anuvasana basti are the best, and among all dravyas taila is best to mitigate the prakupita vata.

2. Pita dosha upakrama:

पित्तस्य सर्पिषः पानं स्वादुशीतैर्विरेचनम् ।

स्वादुतिक्तकषायाणि भोजनान्यौषधानि च ॥

- a. Shodhana → snehana, virechana, raktamokshana etc.
- b. Shamana → shita pradeha, parisheka, abhyanga etc.
- c. Ahara & aushadha → madhura – tikta – kashaya rasa pradhana & pittahara dravya siddha ghrita prayoga, ksheera pana, shitala hradhya sugandhita ahara, jangala mamsarasa, Pitashamaka dravya prayoga e.g., panchatikta, chandana, ushira, mukta, pravala, yashtimadhu etc.
- d. Vihara → shitala & manoanukula vihara, pradeha, parisheka, mukta mani dharana, shita vayu sevana, bhoo gruha, chandra kirana sevana, jalashaya & udhyana vihara, sugandhita vihara, stree sparsha, karpura chandana ushira lepa, manoanukula geeta, vadhya yantra, sharada rutucharya palana etc.

Among all above measures, virechana karma is the best, and among all the dravyas ghrita is best to mitigate the prakupita pitta.

3. Kaphadosha upakrama:

क्षेष्मणो विधिना युक्तं तीक्ष्णं वमनरेचनम् ।

अन्नं रुक्षाल्पतीक्ष्णोष्णं कटुतिक्तकषायकं ॥

- a. Shodhana → Swedana, tikshna – ushna sanshodhana (vamana, virechana, shirovirechana, gandusha etc.)
- b. Shamana → ruksha unmardana, ruksha udavartana, utsadana, upanaha, ushna snana etc.
- c. Ahara & aushadha → katu – tikta – kashaya rasa pradhana, tikshana, ushna, kshara, ruksha ahara & aushadha, medoghna upachara, Kaphashamaka dravya prayoga e.g., madhu, panchakola, trikatu, yavakshara etc.
- d. Vihara → laghu vyayama, jala avagahana, chankramana, stree sevana, upavasa (langhana), ratri jagarana, chinta, ushna sthana nivasa, vasanta rutucharya palana etc.

Among all above measures, vamana karma is the best, and among all the dravyas madhu is best to mitigate the prakupita kapha.

CHIKITSA SUTRA AND MANAGEMENT OF STHANANTARA DOSHA (ASHAYAPAKARSHA, ANULOMA/PRATILOMA GATI OF DOSHA, VIMARGA GAMANA OF DOSHA)

Sthanantara dosha:

When aggravated, a single dosha may cause various diseases, depending upon the various etiological factors and sites of manifestation even if the sama or prakruta dosha gets displaced or moves to other place, under the influencer of vayu, it results in vatadi dosha vridhhi of that place, and causes various diseases. This displaced dosha is called sthanantara dosha.

Sthanantara gata dosha chikitsa:

Generally, treatment should be adopted according to sthana.

For example,

In case of pitta sthana gata vata, treat the pitta

In kaphasthanagata pitta treat the kapha

In vata sthanagata kapha treat the vata.

Dosha gati:

Movement of dosha is called dosha gati. All the movements and activities in the body, take place due to vata. Vata is key force behind the physiological & pathological movement of body elements

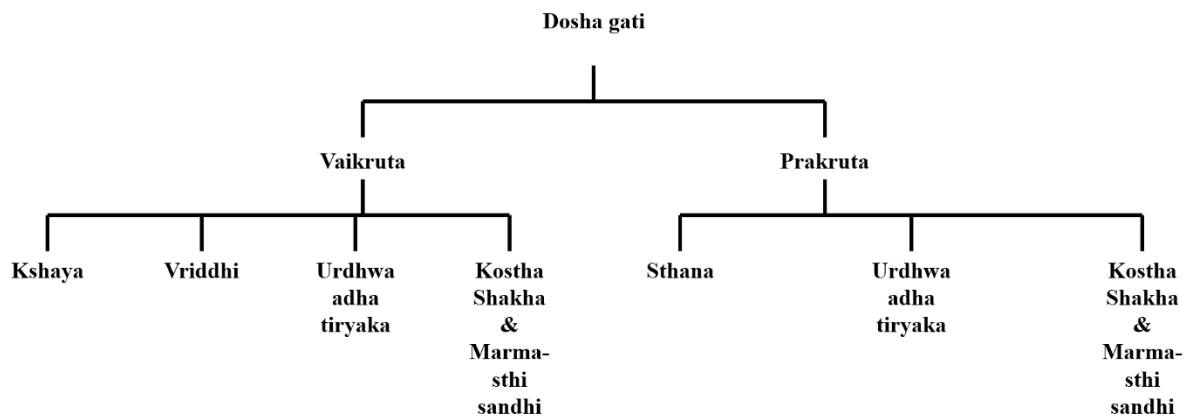
पितं पंगु कफं पंगु पन्गवो मल धातवः ।

वायुना यत्र नीयन्ते तत्र गच्छन्ति मेघवत् ॥

Gati of vayu is provided by its chala guna.

Gati of pitta is provided by its drava and sara guna.

Gati of kapha is inhibited by its sthira guna but can be movable at times owing to its guru guna.



उर्ध्व चाधश्च तिर्यक्च दोषाणां त्रिविधा गति ।

त्रिविधा चापरा कोष्ठशाखामर्मास्थिसन्धिषु ॥

1. Kostha → Original abhyantara rogamarga
2. Twak & raktadi dhatus → Bahya Roga marga
3. Marma & Asthi sandhi → Madhyama roga marga

In 'kiyanta sirsiya adhyaya' maharshi charaka illustrated trividha dosha gati. i.e., kshaya-ssthana-vriddhi, urdhwa-adha-tiryaka, shakha- kostha-marmasthisandhi

Ayurveda aims at the prevention of health and it also aims at curing the ill health. We cannot determine the nature of health without acknowledging the dosha gati but a minor conceptual reflexion of dosha gati.

All gati narrated here are pointed specifically with different aspects and are related to each other.

Urdhwa-adha-tiryaka gati is reciprocal of vriddhi gati. Tiruaka gati is like sakha kosktha gati. Vaishyam or imbalance is defined as vriddhi and kshaya. The balance termed as sthana. Kshaya-ssthana-vriddhi gati is related to both health and unhealthy conditions.

Charaka acharya enriched ayurveda with the knowledge of doshagati.

Its diagnostic and therapeutic usefulness with entirety is mentioned in ayurvedic classics.

Health can be summarized as prakrut gati of doshas and vikruta gati defines illness.

We cannot determine the nature of health without accounting doshagati.

The proper knowledge of doshagati helps us to modify the daily & seasonal region.

Diagnosis and treatment of any disease cannot be complete without considering doshagati.

So, knowledge of doshagati is very important in present era and in practice also.

Ashayaprakarshak hetu:

Under the influence of aggravated vata displacement of movement of normal dosha to other places, which results in manifestation of various diseases, is also called ashayaprakarshak hetu.

Example:

Vata getting aggravated and pulls the prakrita pitta from its site and carried it all through the body. This pitta will cause inflammation and corrosion due to its hot nature wherever it goes. Though pitta is normal, it becomes a foreign substance while travelling and reaching another place. Such pitta which gets pulled from its place is called ashayapakrishta pitta.

Treatment:

Controlling the vitiated vata rather than giving treatment of expel pitta when vata has been brought under control pitta back naturally to its place.

Therefore, the key strategies of intervention as far as ashayapakarsha is concerned is – Vata prashamana, Ashayapakrushta dosha sthapana.

KNOWLEDGE OF LINA DOSHA & ITS MANAGEMENT, DIAGNOSIS

Lina dosha:

लीनमिति अनुत्क्लिष्टं ।

Hidden or secretly accumulated doshas are called lina doshas.

Lina dosha are those which are stuck in their place, not showing prominent feature, and cannot be eliminated easily by shodhana like vamana-virechana etc.

Lina doshas do not show prominent features but they produce various chronic diseases.

Lina dosha chikitsa:

Lina dosha should not be eliminated forcefully otherwise it can lead to destruction of their sites just as extraction of juice from unripe fruit.

These doshas should be aggravated first and then eliminated with the help of suitable purificatory procedures.

If aama is hidden in intestines, then the patient should be given purification mixed with appetizers.

CHIKITSA SUTRA AND MANAGEMENT OF AVARANA AND OF DHATU PRADOSHAJA DISEASES

Avarana:

Avarana is a unique concept in Ayurveda.

It is a condition which has been explained in the context of vata disorders.

Avarana means covering, enveloping or enclosing. In this condition the 'free flowing' and all 'all pervading' vata is obstructed and enveloped by pitta, kapha, tissues, food and excreta.

This obstructed vata causes many disorders. These diseases are called avaranajanya vyadhis.

Components of avarana:

Avaraka → that which covers vata and obstructs it.

Avruta → that which is covered, vata in this instance

Avarana → the entire pathological mechanism wherein an avaraka will cover and block the avruta is called as avarana.

Mechanism:

Pitta / kapha block vata → Vata gets disturbed and it wants to escape → Being powerful and having mobility and minuteness this vata pushes the pitta and kapha to make its way. →

These pitta and kapha are mobilized into the susceptible tissues → Pitta and kapha get lodged in the tissue and cause pitta or kapha symptoms respectively. → But the mechanism is initiated by vata itself. Therefore, even after being subjected to avarana, vata has control over the pathogenesis. It is authoritative. → The vitiated vata throws the pitta and kapha here and there i.e., into the susceptible tissues and causes the disease therein.

Types of avarana:

Doshavruta vata → 13

Dhatu, anna, malavruta vata → 9

Anyonyavarana → 20

When vata gets obstructed by components of body inclusive of pitta, kapha, tissues, food, urine and faeces, 22 types of avarana occur.

Pitta obstructing vata → 1

Kapha obstructing vata → 1

Obstruction of vata by tissues other than rasa i.e., by blood, muscle, fat, bone, bone marrow and semen and by all tissues together → 7 types

Obstruction of vata by food → 1

Urine obstructing vata → 1

Faeces obstructing vata → 1

Pitta obstructing 5 vata subtypes → 5

Kapha obstructing 5 vata subtypes → 5

Examples:

Pittavruta vata:

When pitta blocks vata, the below mentioned symptoms are manifested:

Daha → Burning sensation

Trushna → Thirst

Shoolam → Pain, Colic, Spasms

Bhrama → Giddiness

Tama → Feeling as if surrounded by darkness

Sheetakamita → Liking towards cold comforts.

Kaphavruta vata:

When vitiated kapha obstructs vata, below mentioned symptoms are manifested:

Coldness

Heaviness in body

Pain

Symptoms reduce on consumption of pungent, sour, salt tastes

Desire to starve, eat light foods, exercise, to consume dry and hot foods and comforts

Anyanya avaranas:

When one subtype of vata obstructs another subtype of vata, we get 20 types of avaranas.

Prana vata obstructing other four subtypes of vata

Udana vata obstructing other four subtypes of vata

Samana vata obstructing other four subtypes of vata

Vyana vata obstructing other four subtypes of vata.

Apana vata obstructing other four subtypes of vata.

Examples:

Pranavruta vyana

When prana vayu obstructs or intervenes with the functions of vyana vayu, the below mentioned symptoms are manifested.

Sarva indriyaanam shoonyatvam

Smruti kshaya

Bala kshaya

Urdhwa jatruka chikitsa should be conducted.

Vyanavruta prana:

When vyana vayu obstructs or intervenes with the functions of prana vayu, the below mentioned symptoms are manifested:

Sweda atyartham

Lomaharsha

Twak doshaha

Sneha yukta virechana in these conditions.

Treatment:

General treatment principles:

In avarana vata is the prime causative factor so vata which is responsible for obstruction of other dushya should be treated first.

Abhyanga, svedana, abhyantara snehapana, basti should be used.

Similarly alternate hot and cold procedures should be followed.

Anabhishtyandi, unctuous diet should be given which clears the srotas.

Vatanulomaka medicines should be given which is not opposite to kapha and pitta.

Yapana basti, Madhura anuvasana basti should be given.

Rasayana like shilajatu, guggulu, chyavanprasha should be given.

Treatment of vata should be done along with the dosha involved in avarana.

Specific treatment principles:

Pitavruta vata:

Medicine curative of pitta and not antagonistic to vata.

Cold and hot lines of treatment in alternation barley, Sali rice, yapana basti, purgation, affusion with the medicated oil or ghee or milk prepared with bala.

Kaphavruta vata:

Medicine curative of kapha and regulative of vata.

Strong dose of sudation, evacuative enema and emesis along with purgation.

Pittakaphavruta vata:

Vatavyadhivat samanya chikitsa

DHATU PRADOSHAJA VIKARA

1. Rasadhatu pradoshaja vikara → ashreddha, aruchi, ashya vairashya, arasagyata, hrillasa, gaurava, tandra, anga marda, jvara, tama, pandu, shrotrrodha, klaibya, krushata, agni nasha, akala valee
2. Raktadhatu pradoshaja vikara → kushtha, visarpa, pidaka, raktapitta, asrikdara, vatarakta, gudapaka, medhra paka, mukha paka, pliha, gulma, vidradhi, nilika, kamala, vyanga, pipilu, tilakalaka, dadru, charmadala, switra, pama, kotha, raktamandala, indralupta, arsha, arbuda, angamarda
3. Mamsa dhatu pradoshaja vikara → adhimamsa, arbuda, mamsakilaka, gala shaluka, gala shundi, Putimamsa, alaji, galaganda, gandamala, upa jihvika, mamsa sanghata, otha prakopa
4. Medo dhatu pradoshaja vikara → asta nindita purusha, prameha purvarupa, granthi, vrudhi roga, gala ganda, arbuda, medoja osthaprakopa, madhumeha, ati sweda
5. Asthi dhatu pradoshaja vikara → adhyasthi, adhi danta, danta bheda, danta shoola, asthibheda, asthi shoola, asthi vaivarnata, danta vaivarnata, kesha – loma – nakha – shramashu dosha, kunakha roga
6. Majja dhatu pradoshaja vikara → ruksha parvanam, bhrama, murcha, tamo darshana, netra abhishyanda
7. Sukra dhatu pradoshaja vikara → klaibya, aharshanam, sukra ashmari, sukra meha, sukra dosha, nishphala sukra (sukra dhatu incapable of producing garbha, if conception occurs it leads to garbhapata or birth of alpa ayu and / or virupa santana)

Dhatu pradosha and sama dhatu are having similar lakshanas. But treatment differs for sama and Nirama avastha.

Dhatu pradosha chikitsa:

Rasa dhatu pradosha chikitsa → langhana (upavasa)

Rakta dhatu pradosha chikitsa → raktapitta shamaka chikitsa, virechana, raktamokshana

Mamsa dhatu pradosha chikitsa → sanshodhana, shastra karma, kshara karma, agni karma

Medo dhatu pradosha chikitsa → apatarpana or karshana, sthauya hara & kapha-mehohara chikitsa

Asthi dhatu pradosha chikitsa → panchakarma, tikta ksheera basti, tikta ghrita prayoga

Majja dhatu pradosha chikitsa → madhura tikta dravya, vyavaya, vyayama, yatha kala shodhana

Sukra dhatu pradosha chikitsa → sukrala dravya prayoga, shodhana, vajikarana

IMPORTANCE OF DOSHA

रोगस्तु दोषवैषम्यं, दोष साम्यमरोगता ।

Disease is the effect of disequilibrium of the dosha while health is the result of equilibrium of the dosha.

दोषा एव हि सर्वेषां रोगाणां एक कारणं ।

Dosha is the causative factor for all diseases.

All nija vikara do not arise except from vata, pitta and kapha. As a bird though flying all over the day does not transcend its shadow same way disease does not occur without vitiation of dosha.

Dosha	Vardhaka rasa	Shamaka rasa
Vata	Katu, Tikta, Kashaya	Madhura, Amla, Lavana
Pitta	Amla, Lavana, Katu	Madhura, Tikta, Kashaya
Kapha	Madhura, Amla, Lavana	Katu, Tikta, Kashaya

Medicine which contains rasa is used on the basis of vitiation of dosha e.g., in jvara guduchi, because jvara is paitika vyadhi and guduchi has tikta rasa so it is pitta shamaka thus concept of dosha is very important for treatment.

Doshopkrama is also general principle of treatment.
Sadhyashdhyata of the disease can be decided based on dosha.

IMPORTANCE OF DUSHYA

While treating the disease proper attention should be given towards dhatusamya. Weak dhatu causes reoccurrence of the diseases.

Physician who minutely examines and determines the condition of dushya and then decides the aggravated dosha and its appropriate treatment.

IMPORTANCE OF BALA

According to roga and rogi bala dose of the medicine, shodhana and shamana chikitsa are decided.

If the patient has good bala he can resist the disease easily and disease will be treated easily e.g., in rajyakshma shodhana is mentioned but it depends on patient's bala.

In udara roga virechana is line of treatment but it is given after accessing patient's bala. Bala is the key factor which can resist disease.

IMPORTANCE OF KALA

For the use of a drug when the proper time has gone by or when it has not come yet does not effective. It is the opportunities of time that brings about success of the administration of drug.

Kala Pratiksha is one type of treatment upakrama. In jvara kala itself is a treatment.

Accumulation aggravation of dosha takes place according to the day, night, season, age etc. considering all these factors treatment protocol should be decided.

Virechana is given in sharada rutu based on this fact.

Chronicity of the disease also depends on the kala.

IMPORTANCE OF AGNI

The life span, complexion, vitality, good health, enthusiasm, glow, vital essence, lustre, heat and the life breathe are derived from agni.

When this agni is extinguished man dies; when a man is endowed with it adequately, he lives long in good health. When it is deranged, he begins to ill. Therefore, the agni is said to be the main stay of life.

शमप्रकोपौ दोषाणां सर्वेषामग्निसंश्रितौ ।

Strength, health, longevity, and the vital breath are dependent on the state of digestive fire and the digestive fire burns, fed by the fuel of food and drink when deprived of them.

The sedation and the provocation of all the humors depend on the condition of the agni.

Hence one should always take care to protect the agni and avoid the causative factors of its disturbance.

IMPORTANCE OF PRAKRITI

Vata, pitta and kapha individual are sadatura while normalcy of all is healthy one.

To understand causative factor of the disease

To understand by which guna the pathogenesis of the disease occurs.

To decide the medicine, their dosage & anupana.

IMPORTANCE OF VAYA

Bala → Sukumara, shleshma dhatu dominant

Madhya → Good strength, paurausa, parakrama, sarvadhatu yukta, klesha saha

Jirna → Decrease the strength, dhatu, paurausa etc.

According to acharya sharangadhara childhood, growth, colour and complexion, skin health, vision, semen, physical capacity and life these get lost or diminished in successive decades of life.

IMPORTANCE OF SATTVA

Those of high psychic quality are the psychic nature as described in the perfect tone of psychic element. Though possessed of small bodies, and despite being affected by severe ailments or either exogenous or endogenous type, they look unaffected, owing to the high tone of their psychic quality.

Knowledge of pravara, avara, and sattva is helpful in treatment. The persons who have pravara sattva their resistance power is good. They can tolerate procedures like agnikarma, kshara, surgery and panchakarma.

Before any surgery assessment of sattva is useful.

IMPORTANCE OF SATMYA

As regards homologation (satmya), means which has become agreeable to person by constant use.

Those who have milk, ghee, mamsarasa and all tastes satmya have pravara bala.

Those who has one rasa satmya has alpa bala and cannot resist to the disease.

Combination of these two has madhyama bala.

IMPORTANCE OF DESHA

The examination of the place may be either for the knowledge of the patient or for the knowledge of the drug.

Habitat of the patient and the type of constitution both must be considered during treatment.

The place where patient is living, where disease manifests, are the important for the treatment. The physician should use the medicines which have opposite quality to that place.

Desha is considered as one of the important environmental factors responsible for the causation of epidemic diseases.

For the collection of the medicine suitable desha should be decided.

IMPORTANCE OF AHARA

Proper diet and dietary habits are very important for maintenance of health and life we must follow ahara matra, ahara vishesha ayatana etc.

Food causes immediate nourishment, strength and support to the body.

It increases the expectancy of life, brilliance, enthusiasm, vital essence and digestive capacity.

Ahara is prana for body if it is consumed properly otherwise it creates disorders.

Strength, health, longevity, and the vital breath are dependent on the state of digestive fire, and the digestive fire fed by the fuel of food.

CHIKITSA SUTRA AND MANAGEMENT OF 'SAMANYAJA AND NANATMAJA' DISEASES

Samanyaja & Nanatmaja vikara:

Samanyaja vikara:

Samanyaja vikara are those diseases which are produced by vitiated doshas either individual or in combinations of two or three. They may...

Ekadoshaja → (vataja/pittaja/kaphaja)

Dwidoshaja → (sansargaja)

Tridoshaja → (sannipataja)

Examples:

8 types of udara, mutrakriccha, shukradosha

7 types of kustha, prameha pidika, visarpa

5 types of atisara, udavarta, gulma, pliha, kasa, swasa, hikka, Trishna, chhardi, hridroga, pandu, unmada

4 types of netra roga, pratishyaya, grahani roga, mada, shosha

3 types of shotha, kilasa, raktapitta

2 types of jwara, vrana, gridhrasi, kamala, amadosha, vatarakta, arsha

1 type of urustambha, sanyasa

20 types of krimiroga, prameha, yonivyapat

Nanatmaja vikara:

The diseases which cannot be produced without involvement of the pradhana dosha (predominant dosha) i.e., only one dosha is responsible for such disease, whereas other doshas may be involved as apradhana dosha (associated doshas)

For example:

Vatavyadhi is produced by vata dosha, in which pitta & kapha may or may not be involved as associated doshas and the vatavyadhi cannot be produced without involvement of vata, hence it is a nanatmaja vikara.

Vataja nanatmaja vikara → 80

Pittaja nanatmaja vikara → 40

Kaphaja nanatmaja vikara → 20

Vataja nanatmaja vikara:

Examples:

Ardita, Ekangavata, Sarvangavata, pakshaghata, akshepaka, gridhrasi, padashula, manyastambha, badhira, hikka etc.

Pittaja nanatmaja vikara:

Example:

Daha, antardaha, atisweda, raktapitta, kamala, mukhapaka, gudapaka, jivadan, putimukha, raktakotha etc.

Kaphaja nanatmaja vikara:

Example:

Tandra, nidradhikya, gurugatrata, alasya, hridayopalepa, galaganda, atistaulya, mandagni, udardha, shwetavabhasata etc.

Samanyaja & Nanatmaja vikara chikitsa:

These diseases are produced by imbalance of vitiation of doshas; therefore, they can be treated by balancing the dosha. (i.e., bringing about dosha samyata)

Nidana parivarjana

Brimhana of kshina dosha

Shamana of kupita dosha

Shodhana of vriddha dosha

Paripalana of sama dosha are the general line of treatments for bringing about equilibrium state of dosha.

Treatment is given with consideration of rogi-roga bala & dosha balabala.

Doshopakrama → for nanatmaja vikara, specific treatments for respective doshas should be adopted.

4. Detailed description of Dvividhopakrama (Santarpana and Apatarpana) and Shadavidhopakrama (Rookshana, Snehana, Swedana, Sthambhana, Langhana and Brimhana). Detailed description of Shodhana, Shamana and Nidana Parivarjana. Knowledge of Aushadha matra, Sevan kaala and Anupana, Definition and Knowledge of Pathya-Apathya with examples of diseases of various systems.

DETAILED DESCRIPTION OF DVIVIDHOPAKRAMA AND SHADAVIDHOPAKRAMA

Dvividhopakrama

Acharya vagbhata has mentioned two types of therapies viz.

1. Santarpana → Tonifying or nourishing therapy.
2. Apatarpana → Making the body light or reducing therapy.

Santarpana means nourishment, and apatarpana means under nourishment.

Indications of santarpana chikitsa are apatarpana janya vyadhi such as kshaya, shosha, vyadhi-vata etc. Whereas indications of apatarpana are aamadoshajanya & santarpan janya vyadhi such as sthauilya, medovikara, kushtha etc.

Dvividha upakrama also includes six types of therapies.

Langhana → Rookshana, Swedana, → Apatarpana

Brimhana → Snehana, Stambhana → Santarpana

Santarpana:

Word tarpana means sense of wellbeing it is a function of rasa dhatu. Food substances and herbs that increase rasa dhatu and subsequently kapha are all grouped under santarpana.

Nidana of santarpana vyadhi:

Excessive intake of heavy, sweet, unctuous diet.

Alcohol intake

Meat

Excessive intake of jaggery

Lack of exercise

Day time sleep

Santarpanjanya roga:

Prameha, Kushtha, Klebya, Sthauilya, Gaurava, Srotorodha, Kandu, Jwara, Ama dosha, Shopha

Chikitsa of santarpanajanya vyadhi:

Vamana, Virechana, Raktamokshana, vyayama, upavasa, sudation

Intake of abhaya with honey, dry food, churna and pralepa which are recommended in itching.

Formulations like triphala Kashaya, Mustakadi Kashaya, Kusthadi churna

Apatarpana:

Under nutrition – Regimen which leads to emaciation of the body, viz. Panchakarma, Upavasa, Ati vyayama

This therapy includes langhana chikitsa

3 types of apatarpana viz.

1. Langhana
2. Langhana – pachana
3. Doshavasechana

2 types of langhana chikitsa viz.

1. Shodhana
2. Shamana

10 types of langhana chikitsa viz.

- | | |
|-------------------|------------------|
| 1. Vamana | 6. Upavasas |
| 2. Virechana | 7. Pipasa |
| 3. Niruha basti | 8. Atapa sevana |
| 4. Shirovirechana | 9. Maruta sevana |
| 5. Pachana | 10. Vyayama |

Nidana of apatarpanajanya vyadhi:

Ruksha annapana sevana

Langhana

Kriyatiyoha

Shoka, chinta, bhaya

Vega nigraha

Ati shrama

Ati maithuna

Apatarpanajanya roga:

Agninasha, jwara, balahani, daurbalya, kasa, parshwa shula, hridaya vyatha, sandhibheda, urdhwa vata, unmada

Chikitsa of apatarpanajanya vyadhi:

This therapy includes brimhana chikitsa that is treatment with dhatupushtikara & brimhana aushadha ahara-vihara.

It is indicated for apatarpanajanya roga.

Santarpana chikitsa is classified as following –

1. Sadhya santarpana:

Administration of therapies and drugs, those provide nourishment to the body and dhatu immediately is known as Sadhya santarpana.

For example: Brimhana basti prayoga

Brimhana dravya prayoga like draksha, kharjura, parushaka, dadima etc.

2. Abhyasha santarpana:

Nourishing therapy that includes brimhana dravya prayoga and dhatu pushtikara ahara-vihara sevana continuously for longer duration, is known as abhyasa santarpana.

For example: Dugdha & Ghrita nitya sevana mamsarasa.

Madhura, amla, shita, snigdha, mrudu gunayukta ahara, abhyanga, anuvasana basti etc.

Importance of apatarpana in chikitsa / importance of langhana / rookshana / swedana in chikitsa

General treatment protocols (Doshopakrama)

All kapha doshopakrama are langhana in pitta upakrama only virechana upakrama denotes langhana. In vata upakrama it depends on stage as upastambhit where swedana, mrudu samsodhana, Deepana, pachana can be given. If langhana is used in contraindicated people or nirupa stambhita vyadhi avastha it will cause kshaya. Vaidhya can safely use langhana in kapha and pitta dominance but in vata dominance langhana must be used with precaution and never in nirupastambhit avastha.

In shishira rutu in late winter, langhana can be given even after for vata vyadhi or where langhana is contraindicated otherwise.

Treatment protocols of each srotas:

Rasavaha → All types of langhana are the remedy for disorders of rasa.

Raktavaha → In raktavaha srotas diseases one should adopt the treatment which evacuates blood and pitta such as purgation fasting and bloodletting.

Mamsavaha → treated with shodhana

Medovaha → treatment of sthaulya is started as apatarpana

Annavaha → Langhana is useful for annavaha srotas and amashayotha vyadhi

Langhana is not indicated in asthi, majjavaha srotas as routine treatment.

In specific disease condition:

Jwara: Langhana is indicated in all types of jwara except for 4 types where langhana is contraindicated. Also, langhana is advised in purvarupa avastha of jwara. Langhana helps in dosha kshaya, agni is kindled consequently thus apyrexia, lightness occurs and appetite increases.

In ama janya vikara → Langhana is indicated. Langhana is a choice of therapy in diseases originating from amashaya. These can be enlisted as atisara, pravahika, grahani, ajirna, chhardi.

Prameha is the disease where apatarpana and santarpana both are indicated depends upon type and physique of patient whether he is obese, strong or lean and weak.

Indication of langhana according to types:

Kshudha nigraha → Indicated in the diseases of annavaha srotas where agnimandhya or formation of ama is initial cause.

Trushna nigraha → Indicated in udara vyadhi. Acharya sushruta indicated in arochaka, pratishyaya, sotha, agnimandhya, udara, kushtha etc.

Deepana → Indicated where agnimandhya is the cause in the triad of arsha, atisara, grahani

Pachana → In some individuals pachana is required prior to snehana swedana as purvakarma of shodhana. Pachana is indicated in sama taruna jwara, amavastha of atisara, in amlapitta when patient is not fit for shodhana.

Vyayama →

It is a treatment in medoroga.

In prameha type of physical exercise is advised. Physiotherapy for different vatavyadhi can be considered as vyayama.

Atapa →

Indicated in shwitra

In phakka sun rays are rich source of vit D so for rickets atapa sevana is useful.

Ultra violet rays therapy indicated in psoriasis.

Maruta sevana

A walk in non-polluted air along with goats can be considered as maruta sevana.

Rookshana →

Rookshana produces roughness, dryness, non-sliminess.

Properties are ruksha, laghu, khara, tikshna, ushna, sthira helps in rukshana.

Some Vaidya use rukshana as a part of purvakarma before snehana swedana.

Indications are urustambha, medoroga, visarpa.

It is indicated in condition where kledadhikya is present so can be used in kustha, prameha also.

Swedana →

Drugs possessing stambha, gourava properties which produces sweat and alleviated stiffness, heaviness and cold.

Swedana has ushna property, it reduces pain.

Indications are disease condition includes stambha, shoola, gaurava, supti.

It is well known purvakarma for shodhana but while considering in dvividhopakrama if the patient is of pitta prakriti or contraindicated for swedana then he should be given mrudu swedana.

Due to swedana grathit shleshma dissolves, srotas got soften and samprapti bhanga takes place.

Swedana as pradhanakarma is useful in many vatavyadhi, especially in pakshawadha also in diseases like hikka, shwasa, amavata.

In arsha and mutrakruccha, avagaha sweda is indicated.

Apatarpana upakrama helps to mitigate the drastic problem arised due to abnormality of tridoshas in the body like langhana mitigates kapha-pitta abnormality rukshana decrease the kapha & pitta swedana is vata kapha hara.

Importance of santarpana in chikitsa / Importance of brimhana / snehana / stambhana in chikitsa

Santarpana upakrama is aimed to improve the nutrition level of the body.

In santarpana upakrama there are 3 types of therapies included – Brimhana, snehana, stambhana.

Brimhana:

The treatment which increases body size or cause nourishment of the body is considered brimhana chikitsa.

Brimhana dravyas have the properties of guru, shita, mridu, snigdha, bahula, picchila, manda, sthira and slakshna.

These drugs act at the level of Dhatvagni and thus helps in proper nourishment of dhatu.

Those patients who are krish and kshaya-janyavyadhiyukta such as OA, impotency, infertility, azoospermia etc. are treated with the use of brimhana chikitsa.

Snehana:

The treatment that causes oiliness, moistness, fluidity and softness in the body is termed as snehana.

It can be used in vata vyadhi like osteo arthritis, stress, headache, backache, insomnia and other.

Aabhyantara snehana can be done in the form of snehapana for the purpose of shodhana anuvasanabasti, matrabasti and Sneha with meal in the form of ghee.

This chikitsa provides nourishment, strength and relaxation to the affected body parts. It helps to remove out the toxic effects and improve the metabolism of the cells.

Stambhana:

The treatment that prevents mobility and the flow of body substances and fluid is known as stambhana chikitsa.

Dravya with stambhana capability contain laghu, sheeta, mridu, drava, slakshna, ruksha, sukshma and sthira properties.

Picchha basti and avapeeda nasya are the examples of stambhana treatment.

Santarpana upakrama helps to mitigate the drastic problem arised due to abnormality of tridosha in the body like brimhana act as vata pittahara. Snehana is vatapittahare and stambhana eliminates the pitta and vatta.

The target achieved by upakama is dosha saamyata. It is attained through balancing the gunas, ultimately by achieving the panchabhautika stability.

Shadvidhopakrama:

लङ्घनं बृंहणं कालं रुक्षणं स्नेहनं तथा ।

स्वेदनं स्तम्भनं जानीते यः स वै भिषक् ॥

According to acharya charaka, those who have the knowledge about all six types of therapies are called bhishaka or vaidhya. These therapies are langhana, brimhana, rukshana, snehana, swedana, stambhana

1. Langhana:

Reducing therapy - that which brings lightness in the body.

Types of langhana:

चतुष्प्रकारा संशुद्धिः पिपासा मारुतातपौ ।

पाचनान्युपवासश्च व्यायामश्चेति लङ्घनं ॥

Ten types viz.

- | | |
|-----------------|------------------|
| 1. Vamana | 6. Upavasa |
| 2. Virechana | 7. Pipasa |
| 3. Niruha basti | 8. Aatapa sevana |
| 4. Nasya | 9. Maruta sevana |
| 5. Pachana | 10. Vyayama |

Two types:

1. Shodhana: Vamana, Virechana, Nasya. Raktamokshana, Basti
2. Shamana: Pachana, Deepana, Kshudha, Trushna, Vyayama

Indication: Amadoshajanya vikara
Santarpanajanya vikara
Sthaulya, prameha, kustha etc.

Contraindication: Vatavridhhi, krush purusha, apatarpanajanya vyadhi

Samyaka langhana lakshana: Sharira laghuta

Aamapachana & Agnideepana
Hridaya, kantha, mukha suddhi
Samyaka mala mutra tyaga
Santarpanotha roga prashamana

Ati langhana lakshana: Angamardana, Parvabheda, Kasa, Shwasa, Jrimbha utpati,
Kshudhanasha, dehs & agnibala nasha, aruchi, trushnadhiya,
chitta vibhramsha

2. Brimhana:

Nourishing therapy – increases the musculature or bulk of the body.

Indication: Aparpanajanya roga, vata vyadhi, kshatah, kshina, stri madya nityasevi,
grishmakala

Contraindication: Santarpanajanya roga, Amadosha, Atisnigdha, Urustambha, Kaphavridhi
etc.

Samyaka brimhana lakshana: Sharira & dhatu Pushti

Bala vrudhi

Krushata dosha nasha

Atarpanottha roga prashamana

Ati brumhana lakshana:

Sharira sthulata

Sthaulya astadosha utpatti

Santarpanottha roga utpatti

3. Rukshana:

Drying therapy – brings dryness, roughness and non-sliminess

Indication: Abhishyandajanya roga, mahadosha, marmasthana gata roga, urustambha etc.

4. Snehana:

Oleation therapy – brings unctuousness, sliminess, softness & moisture.

Snehana bheda:

Chaturvidha Sneha:

1. Ghrita
2. Taila
3. Vasa
4. Majja

Based on Sneha yoni:

1. Sthavara Sneha
2. Jangama Sneha

Based on Sneha matra:

1. Hrisiyasi matra – 3 hours
2. Hrashwa matra – 6 hours
3. Madhyama matra – 12 hours
4. Uttama matra – 24 hours

Based on Sneha paka:

1. Mridu paka
2. Madhyama paka
3. Khara paka

Based on snehana prayoga:

1. Bahya snehana
2. Abhyantara snehana

Based on snehayoga:

1. Acchapeya: Sneha without mixing.
2. Pravicharana: Sneha long with various preparations.
3. Yamaka Sneha: combination of any 2 of chaturvidha Sneha
4. Trivrut Sneha: combination of any 3 sneha
5. Maha Sneha: combination of all 4 sneha.

Indication:

स्वेध्याः शोधयितव्याश्च रूक्षा वातविकारिणः ।

व्यायाममद्यस्त्रीनित्याः स्नेहा स्युर्ये च चिन्तका ॥

Contraindication: Amadosha, Nava jwara, mandagni, murccha, garbhini etc.

Samyaka snigdha lakshana:

Vaanulomana

Agnideepana

Snigdha & asamhata varcha

Mardavata

Snigdhatta

Atisnigdha lakshana:

Panduta

Gauravata

Jadyata

Purishasya apakvata

Tandra

Aruchi

Utklesha

5. Svedana:

Sudation – removes stiffness, heaviness, coldness, induces sweating.

Types:

According to charaka

1. Ekanga sweda → Svedana to one part of body.
2. Sarvanga sweda → Svedana all over the body.

1. Snigdha sveda → e.g., shastika shali pinda sveda
2. Ruksha sveda → e.g., valuka sveda

1. Sagni sveda → Direct contact with agni
2. Niragni sveda → No direct contact with agni

13 types of sagni sveda:

1. Sankara sveda → Pinda sveda with or without pottali
2. Prastara sveda → Svedana with stone slab
3. Nadi sveda → Svedana with vapours through a pipe.
4. Parisheka sveda → Pouring of warm oil over the body.
5. Avagaha sveda → Hot tub bath
6. Jentaka sveda → Sudatorium
7. Ashmaghna sveda → preheated slab of stone
8. Karshu sveda → Trench containing large space inside
9. Kuti sveda → Svedana on the round shaped hut
10. Bhoo sveda → Svedana on the ground
11. Kumbhika sveda → Svedana with help of kumbha
12. Kupa sveda → Svedana with the help of kupa.
13. Hollaka sveda → A bed is prepared over the burnt smokeless & hot dung.

10 types of niragni sveda:

1. Vyayama → Exercise
2. Ushna sadana → Warm room
3. Guru pravarana → Covering with thick blankets
4. Kshudha → Hunger
5. Bahupaan → Excessive alcohol
6. Bhaya → Fear
7. Krodha → Anger
8. Upanaha → Poultice
9. Aahava → Wrestling
10. Aatapa → Sun bath

Indications: Pratisyaya, kasa, hikka, svarabheda, sarvanga vata, shoola, granthi etc.

Contraindication: Garbhini, Raktapitta, Pittaja roga, Kshaya etc.

Samyaka snigdha lakshana	Atisnigdha lakshana
Reduction of cold	Aggravation of pitta dosha
Reduction of pain	Unconsciousness
Relief from stiffness	Lassitude
Softness of body	Excessive thirst
Sweating	Burning sensation

6. Stambhana:

Astringent therapy – that which stops the flow of doshas.

Indication: Pitta prakruti, kshara-agni-dagdha, chhardi, atisara, srotodushti etc.

Samyaka stambhana lakshana: Roga shanti & Bala Prapti

Atistambhana lakshana: Shyavata, Stabdha gastrata, hanugraha, varchagraha etc.

Importance of shadvidha upakrama:

Shadvidha upakrama helps to mitigate the drastic problem arising due to abnormality of tridoshas in the body like langhana mitigates kapha pittaja abnormalities. Brumhana act as vata-pittahara, Rukshana decrease the kapha and pitta. Snehana vata-pittahara. Swedana is vata-kaphahara and stambhana eliminates the pitta and vata dosha.

The target achieved by any form of upakrama is dosha saamyata. It is attained through balancing the gunas, ultimately by achieving the panchabhautika stability.

As per Ayurvedic texts shadvidha upakrama is a brief description of ayurvedic basic principles of chikitsa.

Shadvidha upakrama works on the principles of samanya vishesha siddhanta and act by balancing the proportion and based on the combination of panchabhautas in the body.

It can be very beneficial if the assessment of the dosha. Roga and rogi is done carefully therefore it can be considered yuktivyapashraya chikitsa. It can be used in prevention and management of the lifestyle disorders.

DETAILED DESCRIPTION OF SHODHANA, SHAMANA AND NIDANA PARIVARJANA

Shodhana:

Shodhana means cleansing or evacuatory treatments. These treatments are preferred to throw away the unwanted metabolic wastes and tissue toxins out of the body.

To tolerate this treatment, the patient needs to be stronger. Thus, shodhana treatment is given for people who have more bala and mamsa. It should be thought of only in the presence of 'bahu dosha' excessive morbidity.

Those are five in numbers; hence they are called as panchakarma.

Indication: Bahudosha avastha, Avipaka, Aruchi, Sthaulya, Panduta, Gaurava, kandu etc.

Contraindication: Aparicharaka, chanda, asuyaka, atikshina bala mamsa etc.

Importance of shodhana:

Rutu anushar shodhana (Roganutpatikara chikitsa):

E.g., Vamana in vasant, Virechana in sharada, Raktamokshana also in sharada, basti in varsha rutu to prevent the diseases.

Rasayana vajikarana purva shodhana:

Acharya has mentioned that ‘as dirty clothes cannot be coloured, patients without shodhana cannot be coloured properly, patients without shodhana cannot get the proper result of rasayana & vajikarana.

दोषाः कदाचित् कुप्यन्ति जिता लङ्घनपाचनैः ।

जिताः संशोधनैर्येषु न तेषां पुनरुद्भवः ॥

The diseases, treated with shamana chikitsa like langhana-pachana may recur but the diseases treated with shodhana chikitsa do not occur.

Shamana:

Shamana means pacificatory or palliative form of treatment. Shamana treatment is opposite of shodhana chikitsa. This should be considered in those patients who are not fit to undergo shodhana chikitsa.

Thus, shamana chikitsa is administered in the patients who have less bala and mamsa. It is also thought of in the presence of heena or madhyama quantity of morbidity.

There are 7 types of shamana chikitsa including 2 dravyabhoota & 5 adravyabhoota chikitsa

1. Pachana → Using digestant e.g., chitraka, musta
2. Deepana → Using appetizers e.g., trikatu
3. Kshudha → Fasting or intake of less food.
4. Trishna → Intake of less or no water.
5. Aatapa sevana → Exposure to sun rays.
6. Maruta sevana → Exposure to fresh air.
7. Vyayama → Exercise

Indication: Madhyama & alpa dosha avastha, vriddha, bala, garbhini, durbala, mandagni, hridroga etc.

Contraindication: Achikitsaya purusha

Importance of shamana:

This chikitsa does not affect the root of the disease; hence it can never result in complete removal of disease. The approach, however, reverses the damage caused by the disease. It focuses on altering the body's roga balance through the administration of right combination of medicines, change in diet & lifestyles.

In common diseases such as jvara, pratishyay, atisara, and other mild conditions, the roga imbalance does not require any stringent approach hence here the shamana chikitsa acts as the primary mode of care.

Nidana parivarjana:

Avoiding the etiological factors is itself a treatment. Nidana parivarjana is having utmost importance in Ayurvedic treatment.

Importance of nidana parivarjana:

Nidana parivarjana refers to avoiding etiological factors by patient and treating the etiological factors by patient and also treating the etiological factors of vata dosha are to be avoided by patient, and the physician has to treat vata prakopa.

Various diseases can be cured with nidana parivarjana only, while all the ayurvedic treatments are incomplete without nidana parivarjana.

If a patient continuous nidana sevana, physician cannot treat him successfully, or if the disease subsides due to shodhana & shamana but patient continues nidana sevana, it leads to relapse or recurrence of disease that can advance to chronic or complicated stage.

To avoid relapse or recurrence of any disease, patient must avoid the etiological factors even after successful treatment.

Nidana parivarjana not only helps in treatment but it also helps in prevention of the disease.

E.g., in rutucharya palana the etiological factors of the respective accumulating doshas should be avoided to prevent their aggravation such as during vasant rutu one should avoid kaphavardhaka ahara vihara sevana.

KNOWLEDGE OF AUSHADHA MATRA, SEVAN KAALA AND ANUPANA

Aushadha matra:

There is no fix dose for every individual it has been decided as per kala, agni, vaya, bala, prakruti, dosha, desha.

Agni → Mandagni / samagni / tikshnagni / vishmagni

Vaya → Bala / Madhyama / vrudha

Bala → Avara / madhyama / pravara

Dosha → Vata / pitta / kapha / sansarga / sannipataja

Prakruti → Vataja / pittaja / kaphaja / dwandwaja / sama (tridoshaja)

Desha → Bhoomi desha & aatura (dashavidha pariksha)

Kala → Rutu / Aushadha sevana kala (Pratah / sayam)

Balanusara aushadha matra:

Inadequate or less dose of a medicine is unable to cure a disease just as less quantity of water is unable to stop a fire.

Overdose of a medicine may lead to adverse effects and complications just as the excess rain destroys the crops.

Therefore, dose of a medicine should neither be less nor be more and it should be decided with proper assessment of doshabala, vyadhibala, Rogibala

Balyavastha anusara aushadha matra:

Medicines should be given in drava or leha, rupa to children. Shurna or kalka should be licked with ghrita-madhu. Vati or Gutika should not be given.

According to acharya sushruta, up to 16 years of age there is balyavastha and the balyavastha is having three subtypes viz.

1. Ksheerapa:

The children of 1 month to 1 year of age and those consume breastmilk only are called ksheerapa. If medicines must be given to these children, then it should be given to the nursing mother and the medicine can also be coated on nipple of mother in the quantity of anguli parva dvaya matra.

2. Ksheerannada:

Those children who consume breastmilk and foods are called ksheerannada. They are 1 to 2 years of age. Churna or Kalka in dose of kolasthi matra should be given to them.

3. Annada:

Those children who consume foods only are called annada. They are of 3 to 16 years of age. Kolamatra aushadha should be given to them.

The kalka, churna, avaleha, doses according to age –

Age	Matra
1 month	1 Ratti
2 months	2 Ratti
4 months	4 Ratti
6 months	6 Ratti
9 months	9 Ratti
12 months	12 Ratti
2 years	2 Masha
16-17 years	16 Masha

For kwatha this does is four times more.

Aushadha matra samanya (Adult dose):

Aushadha kalpa	Aushadha matra	
Rasa, Bhasma, Lauha, Pishti	1 to 3 Ratti	125 to 375 mg
Parpati	2 to 4 Ratti	250 to 500 mg
Vati	½ to 1 Taula	500 mg to 1 gm
Swarasa	½ pala	24 ml
Kalka	1 karsha	12 gm
Kwatha	1 to 2 pala	48 to 96 ml
Churna	1 karsha	6 to 12 gm
Avaleha paka	½ pala	12 to 24 gm

Aushadha sevana kala:

Time of administration of medicine depends upon rogiroga / avastha.

For successful treatment, administration of medicine with proper dose is essential.

Acharya vagbhata has mentioned 11 types of aushadha sevana kala.

1. Abhakta → Empty stomach

Intake of medicine empty stomach is useful in kapha prakopa & in case of balwana rogi.

2. Purvabhakta → Before bhojani

The medicine given at this time digest fast and imparts strength to the body.

Useful in apana vayu vikaras such as vibandha, udavarta, ashmari, mutrakruchha, pradara etc.

3. Madhyabhakta → In between the intake of food.

After intake of half of the food, administration of medicine and then intake of remaining food is called madhyabhakta.

It is useful in samana vayu vikaras such as grahani, annadravashula, parinama shula, atisara, pravahika etc.

4. Sabhakta / saanna → Mixed with foods

Intake of medicine mixed with food is useful in aruchi.

5. Adhobhakta → After food

Intake of medicine just after food is useful in vyana vayu such as uchcha raktachap & in udana vayu vikara such as swara bheda etc.

6. Samudga → Pre and post prandial

Intake of medicine before and after food is useful in kapma, aksheepaka, hikka etc.

7. Bhaktantara → Repeatedly in between meals

Intake of medicine frequently in between meals is useful in aruchi etc.

8. Sagrasha → with every bite of meal

Intake of medicine with every morsel is useful in pranavayu vikara such as shwasa etc.

9. Grasantara / Kavalantara → In between two morsels

Intake of medicines in between two morsels is useful in pranavayu vikaras.

10. Muhur muhur → Frequent intake of medicine

Frequent intake of medicine is useful in visha vikara, chhardi roga, hikka, swasha etc.

11. Nishi → At night

Intake of medicine at night is useful in urdhvajatrugata vikaras.

Importance of aushadha kala:

Just as food becomes poison when taken in improper time but the same food becomes an amruta when taken in time, so does the aushadha, in non-time becomes a poison but in the proper time, becomes an amruta.

When bhesaja is administered beyond the time or before the time will not be effective. Kala is the reason for the medicine to act effectively kala brings the yogyata to the bhesaja.

Even though these kalas have been mentioned there are some specified times for certain conditions for example, avapeedaka Sneha in mutra vikaras, good muhurta for the drug administration, raktaja gulma should be treated after tenth month.

Hence to utilize the aushadha to its optimum level, Bhaishajya kaalas have been quoted depending on the predominance of the doshas, seat of disease, frequency of the doshas, seat of disease, frequency of attack etc.

Aushadha kala are the essential tools for administration of aushadha, negligence may lead to the grave deficit in the treatment.

Evaluation of vata, jeernalinga, ritu, vyadhi doosha, desha plays a pivotal role in context of aushadha kala.

Vata dosha has given prime importance in context of aushadha kaala, though pitta and kapha are considered at some places.

Anupana:

Anupana refers to substances taken with or after diet and drugs.

The best anupanas have properties opposite to the dhatus.

Anupana is considered as half medicine in ayurveda because it provides nourishment to the dhatus, help in digestion of food, digestion & absorption of administered drugs etc. Anupana acts as vehicle for drugs which help in the body, and hence enhances the efficacy of drugs. Sushruta describing the qualities of the shreshta anupana – water, says by virtue of its toyatmakatva and presence of sarvarasa, it is most favourable anupana.

Examples:

Ushnata:	Pitta vikara	Sheeta jala (anupana)
	Raktaja vikara	
	Vidaha	

Sheetata:	Vataja vikara	Ushna jala (anupana)
	Kaphaja vikara	

Tridoshaja vikara: Adraka svarasa + madhu

Importance of anupana:

Anupana is a factor which helps in absorption as well as in the efficacy of the drug.

The potency of the medicine gets enhanced and brings about the desired effect when given with suitable anupana.

Anupana provide a medium of administration of drugs with acceptability & palatability.

Anupana brings about pleasure, energy, nourishment satisfaction and steadiness in the food eaten. It helps in breaking down, softening, moistening, digestion, assimilation and instant diffusion of food and drugs taken.

DEFINITION AND KNOWLEDGE OF PATHYA-APATHYA WITH EXAMPLES OF DISEASES OF VARIOUS SYSTEMS**Pathya-Apathya**

Pathya is said as the one which is suitable for the srotomaya shareera and for the manas. So, the ahara which is suitable for shareera and manas is called as pathya and vice-versa.

As the word path refers to doshas, dhatus etc. so the whole shareera itself can be considered as path, so the one which is beneficial for the shareera is called as pathya.

Pathyapathya depends upon following 6 factors –

1. Matra
2. Kala
3. Kriya
4. Bhoomi
5. Deha
6. Dosha

Consideration of all these six factors is essential before deciding pathyapathya, because use of proper pathya can act as a treatment itself, while improper use of pathya can act as apathya.

Ashtavidha ahara vidhi vishesha ayatana:

1. Prakruti → Natural quality of dravya
2. Karana → Processing of dravyas
3. Samyoga → Combinations of various dravyas
4. Rashi → Quantity of food
5. Desha → Place of origin of the dravyas.
6. Kala → Rutu & dosha & roga avastha
7. Upyoga samsthana → Dietetic rules
8. Upyokta → Consumer must take food as per his satmya.

Apathya:

Those ahara or aushadha which dislodge the dosha from their normal sites and aggravate them but do not eliminate them from body, are called viruddha ahara, and these are harmful or apathya.

There are 18 types of apathya

Rutu anusara dosha prakopaka ahara is also apathya that must be avoided for prevention of several diseases.

Examples of pathyapathya

Pathyapathya for vataja vikara		
	Pathya	Apathya
Ahara	Ghrita, taila, godhuma, shali, draksha, jangala mamsa	Chanaka, mudga, jambu, puga, shushka mamsa
Vihara	Jala krida, abhyanga, samvahana, brimhana	Ratrijagarana, shrama, chinta, maithuna
Pathyapathya for kaphaja vikara		
	Pathya	Apathya
Ahara	Madhu, yava, mudga, shali, trikatu, chitrak, ushna-ruksha-tikshna ahara	Navanna, godhuma, guda, kshira, ikshurasa, anupa mamsa, guru-snigdha ahara
Vihara	Laghu vyayama, udavartana, vamana	Diwaswapna, avyayama, vegadharana

Importance of pathyapathya:

Pathya is sustainer of all living beings. Food sustains the life of all living beings, complexion, clarity, good voice, longevity, intellect is all conditioned by pathyakara ahara itself.

It is said in this verse that vaidhya without having vyakarana and dhanurdhara without practicing becomes laughing material hence the knowledge of pathya apathya also important to rule out the disease.

Ayurveda considered dietetics as not only a science of nutrition but holy 'yajna karma' in reality.

To avoid the ayoga, atiyoga & mithyayoga of shareera and manas is the Shrestha pathya.

It is said by charaka while explaining the agrya dravyas that the Shrestha apathya is ayaasa (strenuous activities).

To show the importance of the pathya it is said by vaidhya jeevana, it is said that if a patient is following the pathya then why he needs the treatment and if he is not following the pathya then what is the use of treatment.

The whole body is dependent of ahara, nidra, brahmacharya in that ahara has got prime importance and all the body components are made up of ahara only but rogas also occurs because of ahitahara. Hence the pathyahara is the best regimen to protect health.

5. Derivation of the term 'Manas', its sthana (place), Guna (qualities) and Karma (functions). Samanya Chikitsa Siddhanta of Manasa Roga.

DERIVATION OF THE TERM 'MANAS,' ITS STHANA, GUNA AND KARMA

Manas:

Definition:

मन्यते बुध्यते अनेनिति मनः ।

An internal organ of body which is responsible for the valid cognition of an object is known as mana.

Synonyms:

- | | | |
|-------------|-----------|----------|
| • Atindriya | • Chetas | • Chitta |
| • Sattva | • Hridaya | • Svanta |

Sthana of mana:

Heart is the place of mana.

Guna of mana:

Thinking, analysing, reasoning, meditating, determination whatever perceived by mind is its object. These are the chief function of mana.

After those procedures confirm and real knowledge of an object gets derived.

1. Chintya → Whether to do or not to do is being decided by mana is known as chintyam.
2. Vicharya → To accept or to reject a thing on the base of its qualities and inferiorities is called as vicharya.
3. Uhya → Uhya is logical assumption regarding any phenomenon like this will be happened in this way.
4. Dhyeya → Dhyeya is object for which one has attachment or attention.
5. Sankalpa → Object of affirmative knowledge decided on the base of its merits and demerits.
6. Jneyam → Without the help of indriya whatever the cognition of an object perceived by mana is called as mansajneyam.

Control over senses, self-restraint, reasoning, analysing.

On attachment of mana with respective indriya it becomes capable to perceive the cognition of an object.

SAMANYA CHIKITSA SIDDHANTA OF MANASA ROGA

Manasa roga:

Manas as adhithana of roga, vitiation of manasika dosha cause disturbance in buddhi, Sanjna, jnana, smriti etc. is called as manasa roga.

Samanya nidana:

Alpa satva

Vitiation of manasika dosha → Raja & Tama

Emotions or manobhava

All the sharirika and manasika rogas are caused by following three types of etiological factors viz.

1. Asatmendriyarth samyoga
2. Prajnaparadha
3. Parinama (kala)

Samanya lakshanas:

- | | |
|--------------------------|----------------------|
| • Instability | • Depression |
| • Tremors | • Loss of enthusiasm |
| • Intolerance | • Frustration |
| • Excessive perspiration | • Reduced activity |
| • Fear | • Sleeplessness |

Manasa roga samanya chikitsa:

Vikara anutpattikara chikitsa → Preventive measurement

Vikarasya chikitsa → Curative measurement

Preventive aspect:

त्यागः प्रज्ञापराधस्च

Indriya prashamana

Sadvritta palana

Curative aspect:

1. Dravya bhoot chikitsa:

Shodhana chikitsa

Shamana chikitsa

2. Adravya bhoot chikitsa:

Bandhana

Tadana

Tamograha pravesha etc.

General principles of management:

1. Yukti vyapashraya → Shodhana & Shamana

Shodhana → Panchakarma

Vata: Basti

Pitta: Virechana

Kapha: Vamana

Shamana → Medhya rasayana dravyas

Mandukaparni swarasa

Brahmi

Yastimadhu churna with milk

Jyotishmati

Guduchi swarasa

Ashwagandha

Shankhapushpi kalka

Rasa aushadhi → Unmadagaja kesari rasa
Vatakulantaka rasa
Manasamitra vati
Saraswatharista with gold etc.

Bahir parimarjana → Murdhi taila

Shira abhyanga

Shiro pichu

Shirodhara: In chittodwega

Shirobasti: In nidranasha

Shastra pranidhana

2. Daiva vyapashraya:

The term daiva vyapashraya is concerned with all the unknown circumstances, which are beyond the purview of reasoning.

In ayurveda, deva has been used in the various senses like unknown past deeds etc. The evils of past life karmas cannot be cured by the scientific methods of medicine because the diseases so happened are related to past deeds.

Daivavyapashraya methods create confidence and remove the fear and pessimistic tendencies. It may in some way indirectly help the patient in gathering confidence. It works at the level of mind and there by influence the body.

The following treatment in the shape of good deeds is recommended for diseases called by deva.

Mantra: sacred hymes hymns

Niyama

Aushadha

Prayaschitta: Atonement

Mani: Gems

Upavasa: Fasting

Mangala: Auspicious offerings

Svastyayana: Chanting mantra

Bali: Gift

Pranipata: Worshipping god

Upahara: Oblations

Yatragamana: Pilgrimage

Homa

3. Satwavajaya chikitsa:

Withdrawal of mind from harmful objects is called as satvavajaya chikitsa.

Techniques:

Gnana: Adhyatma gnana

Vignana: Shastra gnana

Ohairya: Anunnati chestasam

Smruti: Anubhootartha smaranam

Samadhi: Vishayebhya niverthyatmani namaso niyamanam

Scope of satvavajaya:

By regulating the thought process (Chintya)

By replacing the ideas (Vicharya)

By channelling the presumptions (Uhya)

By polishing the objectives (Dhyeya)

By proper guidance & advice for taking right decision (Sankalpa)

Trivarga anveshana → Contemplation of three objectives of life (Dharma, Artha, Kama)

Tadvidda seva → Service of those who are well versed in the treatment of mental diseases

Aatma gnana → Self realization

6. Principles & Management of Nutritional deficiency disorders.

Nutritional disorders:

Nutrition:

Nutrition is the science or practice of consuming and utilizing foods. It includes food intake, absorption, assimilation, biosynthesis, catabolism and excretion.

Nutrients:

A nutrient is a substance used by humans to survive, grow and reproduce. Generally, nutrients are classified into macronutrients and micronutrients.

Sufficient energy in the form of carbohydrates, fats and proteins.

Vitamins and minerals, which function as co-enzymes or hormones in vital metabolic pathways or, as for the case of Ca, P as important structural components.

Main nutritional disorders:

Obesity

Kwashiorkor

Marasmus

Anorexia nervosa

Bulimia nervosa

Vitamin deficiency

Trace element deficiency

Malnutrition

The WHO defines malnutrition as ‘the cellular imbalance between supply of nutrients and the body’s demand for them to ensure growth, maintenance and specific functions

Primary → related to diet

Secondary → related to

Nutrient metabolism

Impaired nutrient utilization or storage

Excess nutrient losses

Increased need for nutrients.

PEM:

Protein energy malnutrition

Inadequate intake of protein and calories.

Two main clinical syndromes:

1. Marasmus:

Starvation in infant with overall lack of calories

Somatic protein compartment (Skeletal muscles) affected.

2. Kwashiorkor:

Protein deprivation more severe than deficit in calories.

Visceral compartment (Protein stores in liver) affected.

3. Anorexia nervosa:

Self-induced starvation resulting in marked weight loss.

4. Bulimia nervosa:

Protein binges on food and then induces vomiting.

Management of PEM:

Prevention

Promotion of breast feeding

Development of low cost weaning

Nutritional education and promotion of correct feeding practices

Family planning and spacing of births.

Immunization

Food fortification

Early diagnosis & treatment

Treatment:

Treatment strategy can be divided into 3 stages viz.

1. Resolving life threatening conditions
2. Restoring nutritional status
3. Ensuring nutritional rehabilitation

There are 3 stages of treatment:

1. Hospital treatment:

The following conditions should be corrected.

Hypothermia, hypoglycaemia, infection, dehydration, electrolyte imbalance, anaemia and other vitamin and mineral deficiencies.

2. Dietary management:

The diet should be from local available staple foods – inexpensive, easily digestible, evenly disturbed throughout the day and increased number of feeding to increase the quantity of food.

3. Rehabilitation:

The concept of nutritional rehabilitation is based on practical nutritional training for mothers in which they learn by feeding their children back to health under supervision and using local foods.

Obesity:

Obesity is a medical condition in which excess body fat accumulates to the extent that it may have a negative effect on health, leading to reduced life expectancy and / or increased health problems.

$BMI = \text{Weight in kg} / (\text{Height in m})^2 = \text{kg/m}^2$

In BMI
 <18.5 = underweight
 18.5 – 24.9 = normal
 25-29.9 = overweight (pre-obese)
 30-34.9 = obese class 1
 35-39.9 = obese class 2
 .40 = obese class 3

Management of obesity:

Exercise: Extra calories should be burnt with exercise unless there is medical contraindication.

Diet: 800 to 900 Kcal daily with restricted diet.

Bulkiness of food is important as the patient needs to be satiated. Dietary fibres, salads, sprouts, oats, and protein rich but low carbs diet with honey-water or warm water in morning and metabolic booster herbs.

Hormonal therapy (to treat endocrine disease, if present)

Use of appetite suppressants & psychotherapy

Surgery (if required)

Vitamin deficiency:

Vitamin	Disorder	Treatment
Vitamin A (Retinol)	Night blindness Xerophthalmia	Tab. Retinol
Vitamin D (Cholecalciferol)	Rickets & Tetany: children Osteomalacia: Adult	Inj. Vit D3 Calcimax tab.
Vitamin E (Tocopherol)	Muscle weakness Ataxia Skin erythematous	Tocopherol acetate capsules
Vitamin K (K1 & K2)	Haemorrhagic diathesis	Inj. Vit. K Oral vit. K
Vitamin B1 (Thiamine)	Beriberi Peripheral neuropathy	Tab. Berin
Vitamin B2 (Riboflavin)	Angular stomatitis	Tab. Riboflavin
Vitamin B3 (Niacin)	Pellagra	Tab. Niacinamide Avoid sun shine
Vitamin B12 (Cyanocobalamin)	Macrolytic anaemia Neuropathy	Inj. Cyanocobalamin
Vitamin B9 (Folic acid)	Megaloblastic anaemia Chronic diarrhoea	Tab. Folic acid 5mg

7. Management of Vardhakyajanita vikara, Indriyapradoshaja vikara, Alzhiemer's Disease, Sleep disorders, General debility.

Vardhakyajanita vikara:

The branch of medicine dealing with the health and care of old people is known as jara chikitsa or Geriatrics.

Acharya charaka has considered more than 60 years of age as jirna or jaravastha, while acharya sushruta mentioned 70 years of age.

Jaravastha is vata pradhana and known as hinavastha. Jara is one among svabhavabala janya vyadhi.

If the diet is substandard in the terms of gramya ahara and when dietary and lifestyle regimens are not followed properly like day sleep, daily coitus without vajikarana, daily alcohol consumption, lack of exercise, mental and emotional disturbance there is vitiation of tridosha, which leads to various progressive pathological changes due to improper utilization of the diet.

Following pathological changes occur in the body viz.

- Loss of compactness of the muscles
- Looseness of joints
- Vitiation of rakta
- Excessive production of meda
- Failure of majja
- Failure of production of sukra
- Loss of oja

Symptoms:

- Lethargy
- drowsiness
- Respiratory rate is increased
- Decreased vitality
- Loss of memory

Vardhakyajanita vikara refers to diseases of elderly (loss of physical & mental abilities in old age is termed as senile).

Examples:

- Indriya daurbalya (Visual and hearing impairments, Parkinson's disease, Alzheimer's disease etc.)
- Khalitya (Baldness)
- Palitya (Greying of hair)
- Timira or linganasha (Cataract)
- Uchcha raktachapa (Hypertension)
- Sandhivata (Osteoarthritis)
- Asthisoushitya (Osteoporosis)
- Kleibya (Impotency)
- Cardiovascular diseases
- Urinary incontinence
- Cancer
- Type – 2 Diabetes etc.

Management of vardhakya janita vikara:

It is a natural and yasya (palliative) disease.

It is essential to deal with this period of aging properly, as it is a time of increased vulnerability to various chronic and degenerative diseases. Vrudhavastha can be managed by palliative treatment.

It is even possible to treat vrudhavastha according to the principles of rasayana, especially according to svabhavavyadhi pratisedhaniya chapter.

Avoid the provocative causes of kshaya and vata for example, excessive physical and mental work, vigorous exercise etc.

Utilization of rasayana, vajikarana and yapana basti regularly.

Follow the principles of sadvrutta and achara rasayana. Involve oneself in the supreme power of the eternal truth by any means as it increases the level of sattva in mind.

If any disease persists take treatment accordingly.

Medicines:

- | | |
|------------------|----------------------|
| • Ashwagandha | • Chopachini |
| • Bala churna | • Eranda mula kvatha |
| • Chyavanprasha | • Brahma rasayana |
| • Pippali churna | • Medhya rasayana |
| • Shatavari | • Shilajatu |

General principles of geriatric care:

The following principles help in caring for elder adults →

- Be patient, kind and sympathetic. Communicate effectively, demonstrate respect.
- Assist elderly to achieve emotional stability
- Provide occupational therapy
- Assist them to take care of visual, auditory and dental aid.
- Protect from injuries, falls and accidents etc.
- Ensure adequate nutrition
- Help elderly to establish good sleep patterns.
- Control of BP, weight and diabetes
- Avoid smoking and alcohol
- Regular, moderate physical exercise
- Avoidance of drug abuse and self-medication.
- Well-balanced diet with plenty of vegetables and fruits, low in saturated fats, refines sugars and fast foods.
- Yoga exercises and medication
- Immunization against influenza, pneumonia, tetanus, hepatitis B.
- Physiotherapy, vocational therapy, psychological and social therapy depending upon the functional capacities.
- Establishment of geriatric clinics.

Indriya pradoshaja vikara:

When the vitiated doshas get localized in sense organs, indriyapradoshaja vikara is produced that results in either upaghata (destruction) or upatapa (diseases) of sense organs.

1. Indriya upaghata:

Destruction or complete damage of sense organs e.g., linga nasha, ghrana nasha, badhirya, sparsha ajnana etc.

2. Indriya upatapa:

Diseases of partial damage of sense organs. E.g., puyalas, arma, abhisyanda, karna kshveda, karna shola, pratishyaya, nasharsha etc.

Indriya pradoshaja chikitsa:

Same as trimarmiya chikitsa.

Nidana parivarjana

Sharira shodhana

Shamana aushadhi prayoga

Sthanika chikitsa

- Pratisarana, Seka, Aschotana, Anjana, Vidalaka etc. for Netra roga
- Prakshalana, Pramajana, karnadhupana, etc. for karna roga
- Prakshalana, nasya, dhooma, etc. for nasa roga
- Pratisarana, dhuma, kavala-gandusha etc. for jihva roga
- Pralepa, pradeha, raktamokshana etc. for twaka roga

Shastra chikitsa: like bhedana, chedana, lekhana, vyadhana

Pathyapathya palana:

Nasahi shiraso dwaram for all types of diseases of sense organs nasya karma is the best treatment as the nostril are gateway of head region and shiras is the seat of all sense organs. A physician should use both sarva daihika & sthanika chikitsa to cure the indriya pradoshaja vikara.

Medicine:

- | | |
|--|-----------------------|
| • Nasya by gau ghrita and paurana ghrita (8 drops) | • Kapikachchhu churna |
| • Shirodhara | • Balamula kvatha |
| • Shankhapushpi churna | • Ashwagandha churna |
| • Brahmi churna | • Jatamansi churna |
| | • Brahmarasayana |

Alzheimer's disease:

Alzheimer's disease is a chronic, irreversible disease that affect the cells of the brain and causes impairment of intellectual functioning.

Alzheimer's disease is a brain disorder which gradually destroys the ability to reason, remember, imagine and learn.

Alzheimer's disease is the commonest type of dementia. It is neuro degenerative disease that usually occurs after the age of 65 years, and is therefore considered senile dementia.

Clinical features:

Cognitive symptoms → Short term memory loss

Non-cognitive symptoms → Problems with thought, disorders of perception, mis-identification, disorientation, mood swings, aggression or depression etc.

Managements:

There is no cure for Alzheimer's disease, available treatments offer relatively small symptomatic benefit but remain palliative in nature.

Current treatments can be divided into pharmaceutical, psychosocial and caregiving

1. To treat the cognitive problems →
 1. Acetyl-cholinesterase inhibitors:
Tacrine
Rivastigmine
Galantamine
 2. NMDA receptor antagonist:
Memantine hydrochloride
2. To treat non cognitive symptoms →
 - a. Non pharmacological treatment, particularly if symptoms are not severe. Assessment of clear precipitants e.g., suboptimal prompting, personal care or toileting), social interaction, activity and exercise.
 - b. In depression: non tricyclic antidepressants (e.g., selective serotonin re-uptake inhibitors, trazodone)
 - c. In psychosis: atypical antipsychotics
The 'do it yourself' approach:
Diet control
Use of exercise
Stress control
Herbal remedies

Ayurvedic aspect of Alzheimer's disease:

Alzheimer's disease does not find a specific mention in ayurvedic texts, but symptomatically it can be considered under the category of smriti vibhramsha / smriti nasha and vata vyadhi. The samprapti of Alzheimer's disease, vitiation of vata in the tissue of body and the brain, cause it to gradually move in a stage of imbalance. Alternatively, the balance of three manasika gunas – satvika, rajasika, tamasika gets disturbed and cause imbalance of mental faculties.

Treatment:

In ayurveda Alzheimer's disease is considered as yapyo roga.

According to modern science, management of AD is difficult and frustrating because there is no specific treatment. Here ayurveda can offer a better care, on preventive as well as promotive aspects of health, of the patient. Persons having familial trends of the disease can adapt ayurvedic medication in an early adulthood itself to prevent the possibility of the disease.

The treatment of atavabhinivesa can be effectively employed for the management of AD.

The patient should be undergone oleation and fomentation followed by purificatory treatments and samsarjanakarma.

Medhya rasayanas should be administered along with symptomatic care and mental support.

The dietetics of the patients should be having Medhya qualities.

Here, rasayana therapy deserves special mention as it provides longevity, memory, intellect freedom from diseases, youth, excellent potentiality of body and sense organs

Acharya charaka mentions mandukaparni swarasa, yastimadhu churna, guduchi swarasa, shankhapushpi kalka as Medhya rasayanas.

Formulations such as panchagavya ghrita, brahmi rasayana, triphala rasayana can be effectively utilized.

Jivaniya as well as ojovardhaka drugs helps in slowing down of degeneration of dhatus and promotes immunity.

Panchakarmas including sirodhara, shirolepana, pizhichil, nasya gives excellent results.

Some formulations →

- Smriti sagar rasa
- Saraswata arista
- Aswagandharista
- Chyavanaprasha
- Nasya by gau ghrita and purana ghrita helps in treatment.
- Swarna bhasma
- Jatamansi churna
- Samshamani vati

Sleep Disorders:

Introduction:

Sleep is a regularly recurring, rapidly reversible neurobehavioral state characterized by quiescence, postural recumbence and reduced awareness of the environment.

Sleep is required for proper brain function.

Sleep disorder classification:

Insomnia disorder

Hypersomnolence disorder

Narcolepsy

Breathing related sleep disorders

Obstructive sleep apnea hypopnea.

Central sleep apnea

Sleep related hypoventilation

Circadian rhythm sleep wake disorders

Parasomnias

Non-REM sleep arousal disorders

Nightmare disorder and REM sleep behavior disorder.

Restless legs syndrome

Substance / medication induced sleep disorder.

A sleep disorder, or somnipathy, is a medical disorder of the sleep patterns of a person. Some sleep disorders are serious enough to interfere with normal physical, mental, social and emotional functioning.

Insomnia disorder:

The essential feature of insomnia disorder is dissatisfaction with sleep, characterized by difficulty falling asleep, difficulty maintaining sleep, or difficulty returning to sleep after awakening during the night.

Quantitative criteria for insomnia disorder include frequency (at least 3 nights per week) and duration (at least 3 months)

Treatment:

Treatment goals:

To improve qualitative and quantitative aspects of sleep, to reduce sleep related distress, and to improve daytime function.

Somatic treatments:

Currently approved drugs include benzodiazepine receptor agonist, tricyclic drug, melatonin receptor agonist, antihistamines and barbiturates.

Psychosocial treatments:

Stimulus control, sleep restriction therapy, relaxation training, cognitive restructuring of irrational sleep related beliefs and sleep hygiene.

Sleep hygiene:

Promote behaviors that improve sleep, limit behavior that harm sleep:

Avoid naps

Get regular exercise

Maintain a regular sleep schedule

Avoid stimulants (caffeine, nicotine)

Limit alcohol intake

Do not look at the clock when awake in bed.

Narcolepsy:

A chronic neurological disorder, which is caused by the brains inability to control sleep and wakefulness.

The hallmark of narcolepsy is extreme daytime sleepiness.

Treatment:

To reduce daytime sleepiness and to manage the symptoms of cataplexy, sleep paralysis and sleep related hallucinations when present.

Monoaminergic stimulants, modafinil

Scheduling regular brief nap

Anidra chikitsa:

Intake of milk or sugarcane juice or meat soup.

Sirobasti or karnapurana

Anga udavartana & snana

Netra tarpana

Sleeping in comfortable position in a place getting exposed to breeze from fragrant

Samvahana & sparshasukha

Massaging the body aids the wellbeing of the muscles along its associated blood supply and skin.

General debility:

General debility (daurbalya) means the lack of strength in a person

General debility is a state of general weakness or feebleness that may be a result or an outcome of one or more medical conditions that produce symptoms such as pain, fatigue, cachexia and physical disability, or deficits in attention, concentration, memory, development and/or learning.

Management:

Treat the underlying cause

Symptomatic treatment

IV fluids (to provide glucose & correct electrolyte balance)

Multivitamin capsules or syrups

Nutritional supplements

Appetizers & digestants with balanced diet should be advised.

Ayurvedic management:

Nidana parivarjana

Roga prashamana chikitsa

Madhura balya supachya dravya prayoga

Rasayana vajikarana prayoga

Abhyanga with mahanarayana taila or Chandana bala lakshadi taila

Aushadha prayoga:

- | | |
|---------------|----------------------|
| • Aamalaki | • Mamsarasa |
| • Haritaki | • Ghrita |
| • Shatavari | • Chyavanprasa |
| • Ashwagandha | • Ashwagandha churna |
| • Yastimadhu | • Dashamularista |
| • Ela | • Drakshasava |
| • Lasuna | • Kumaryasava |
| • Draksha | • Lohasava |
| • Kharjur | |

8. General introduction and principles of Management of diseases produced by Genetic, Environmental and Iatrogenic factors. Disorders due to drug and Food allergy and their management and other allergic conditions.

GENERAL INTRODUCTION AND PRINCIPLES OF MANAGEMENT OF DISEASES PRODUCED BY GENETIC, ENVIRONMENTAL, AND IATROGENIC FACTORS

Genetic disorders:

A genetic disease occurs when a person has one or more abnormal genes, missing genes, extra genes, inactivated genes, or overly active genes that lead to a medical condition.

- Genes are the building blocks of heredity. They are passed from parent from parent to child.
- Genes are found within the cells of all organisms. An individual's genes are present in a large molecule called deoxyribonucleic acid (DNA).
- They hold DNA, the instruction for making proteins.
- DNA is made up of different combinations of four nucleic acid (adenine, thymine, cytosine, guanine), which are arranged in different lengths.
- Proteins do most of the work in cells. Proteins move molecules from one place to another, build structures, break down toxins and do many other maintenance jobs.
- Human cells normally contain 23 pairs of chromosomes.
- One chromosome in each pair comes from father and the other from mother.
- Sometimes there is a mutation, a change in a gene or genes.
- The mutation changes the gene's instructions for making a protein, so the patient does not work properly or it is missing entirely. This can cause a medical condition called a genetic disorder.
- A gene mutation is a permanent alteration in the DNA sequence that makes up a gene.

Types:

1. Acquired mutations:

Acquired mutations occurs at some times during a person's life and are present only in certain cells, not in every cell in the body.

Cannot passed on to the next generation.

2. Heredity mutation:

Heredity mutations are inherited from a parent and are present throughout a person's life in virtually every cell in the body.

Types:

1. Single gene genetic inheritance →

Single gene inheritance, also called mendelian or monogenetic inheritance.

- e.g. Cystic fibrosis
Sickle cell anaemia
Marfan syndrome
Huntington's disease
Hemochromatosis

Single gene disorders are inherited on recognizable patterns: autosomal dominant, autosomal recessive, x-linked.

2. Multifactorial genetic inheritance →

Multifactorial inheritance disorders (complex or polygenic inheritance), are caused by a combination of environmental factors and mutations in multiple genes

e.g., Congenital diseases → Cleft lip, cleft palate, club foot, pyloric stenosis, congenital heart disease, spina bifida

Adult disease → Alzheimer's disease, Schizophrenia, cancer etc.

Multi factorial inheritance also is associated with heritable traits such as fingerprint patterns, height, eye colour, skin colour.

Chromosome abnormalities:

Chromosomes are the carriers of the genetic material, abnormalities in chromosome number, or structure can result in disease. Abnormalities in chromosomes typically occur due to a problem with cell division

e.g. Down syndrome, or trisomy 21 is common disorder that occurs when a person has three copies of chromosome 21.

Turner syndrome (45, XO)

Klinefelter syndrome (47, XXY)

Mitochondrial genetic inheritance:

This type of genetic disorder is caused by mutations in the non-nuclear DNA of mitochondria.

e.g., An eye disease called Leber's hereditary optic atrophy.

Myoclonic epilepsy

Management:

- Many genetic disorders result from gene changes that are present in essentially every cell in the body. As a result, these disorders often affect many body systems, and most cannot be cured. However, approaches may be available to treat or manage some of the associated signs & symptoms.
- For genetic conditions, treatment and management strategies are designed to improve signs and symptoms associated with the disorder. These approaches vary by disorder and are specific to an individual's health needs. For example, a genetic disorder

associated with a heart defect might be treated with surgery to repair the defect or with a heart transplant.

- Some genetic changes are associated with an increased risk of future health problems, such as certain forms of cancer, one well known example is familial breast cancer managed may include more frequent cancer screening or preventive surgery to remove the tissues at highest risk of becoming cancerous.
- Most treatment strategies for genetic disorders do not alter the underlying genetic mutation; however, a few disorders have been treated with gene therapy.
- Gene therapy refers to a form of treatment where a healthy gene is introduced to a patient. This should alleviate the defect caused by a faulty gene or slow the progression of disease.
- Stem cell treatments → Treating diseases like diabetes, osteoarthritis, various blood cancer, sickle cell Anaemia, thalassemia etc. These genetic disease can be treated by the transplantation of stem cells where the normal stem cell replaces the defected cells.

Specific treatment:

- Down syndrome: Early intervention programmes with a team of therapists and special educators who can treat each child's specific situation are helpful in managing Down's syndrome.
- Cystic fibrosis: Newborn screening for early diagnosis.
- Huntington's disease: No cure exists, but drugs physiotherapy and talk therapy can help manage some symptoms.
- Duchenne muscular dystrophy: Corticosteroids
- Sickle cell anaemia: Treatments include medication, blood transfusion, and rarely a bone marrow transplant.
- Hemophilia: Injections of clotting factor or plasma.

Aanuvanshika vyadhi:

In ayurveda, hereditary diseases are also explained by ancient sages, acharya sushruta termed such diseased as aadibala pravruta, Acharya charaka mentioned kulaja vyadhi.

Examples of aadibala pravruta roga →

Kustha, arsha, prameha, shwitra, apasmara, timira, vatarakta, arbuda, medovridhi, khand otha, khanda talu etc.

Environmental factors of diseases:

- Diseases and conditions caused by factors in the environment are called environmental disease.
- Stress, physical and mental abuse, diet, exposure to toxins, pathogens, radiation and chemicals are possible causes of a large segment of non-hereditary diseases.
- There are many different types of environmental disease including →

- Stress related diseases such as mental health disorders, or lifestyle disease such as cardio vascular diseases, obesity, arthritis, diseases caused by substance abuse such as alcoholism, and smoking related diseases.
- Diseases caused by pollution such as hearing impairment due to noise pollution, breathing problems due to air pollution, GIT problems due to water pollution etc.
- Disease caused by physical factors in the environment such as skin cancer caused by excessive exposure to UV radiation in sunlight.
- Disease caused by exposure to toxic or irritant chemicals in the environment such as toxic metals.
- Diseases related to heat:
Heat cramps, heat exhaustion, heat stroke
- Disease related to cold:
Hypothermia, cold stroke (frost bite)
Trench foot etc.
- Disease related to high altitude sickness:
Acute mountain sickness
High altitude cerebral oedema

Management:

Treatment includes avoidance of etiological factors and symptomatic management.

Examples of possible actions to address environmental risks include the promotion of safer household water storage and better hygiene measures, the use of cleaner fuels and the safer, more judicious use and management of toxic substances at home and in the workplace, as well as occupational safety and health measures.

Specific treatment:

- Related to heat: Moving the person to cool environment
 Giving oral saline solution
 Intravenous isotonic saline.
- Related to cold: Make the person to a warm, dry place
 Remove wet clothing
 Cover the patient with blankets
 Airway warming
 Gastric lavage with warm water.
- Acute mountain sickness: Mild cases → rest & analgesics
 Severe cases → Descent to lower altitude.
- For alcoholism: Antipsychotics are required for alcoholic hallucinations.

Prevention:

- Vaccination
- Environmental sanitation
- Vector control
- Reduction of population growth
- Urban planning
- Sex education and promotion of safe sex.
- Testing and diagnosis

Treatment:

- Promotion of hygiene practices
- Food security and proper nutrition
- Reduction of contact with wildlife and livestock
- Reduction of social inequalities
- Infectious disease surveillance
- Biodiversity preservation and reduction of climate change.
- Development of new antimicrobial drugs.
- Risk communication.

Iatrogenic disorders:

Iatrogenic disease is the result of diagnostic and therapeutic procedures undertaken on a patient (i.e., due to the activity of a physician or therapy).

With the multitude of drugs prescribed to a single patient adverse drug reactions are bound to occur. The physician should take suitable steps to detect and manage them.

Causes:

- Diagnostic procedures (such as mechanical & radiological)
- Therapeutic regimen (drugs, surgery etc.)
- Hospitalization
- Side effects of possible drug interactions
- Medical error
- Negligence
- Unexamined instrument design
- Faulty procedures, techniques, information, methods or equipment.

Examples:

- Adverse effect of prescribed drugs
- Resistance due to over use of drugs
- Incomplete or improper diagnosis and treatment due to medical error or negligence.
- Hospital acquired infections
- Scar formation
- Other complications due to faulty procedures and surgical techniques such as post-operative hemorrhage, nerve injuries, incisional hernia etc.
- Adverse drug reaction (ADR):
- ADR is defined by WHO as any response for a drug which is noxious, unintended and which occurs at doses normally used for prophylaxis, diagnosis and therapy of disease.
- ADR can be classified as predictable (side effects, toxicity, super infection, drug interactions) and unpredictable (intolerance, idiosyncrasy and allergy or pseudo allergy)
- Hazards of blood transfusion:
- Complications occur in 2% of blood transfusions.
- Immunological reaction: Allergic anaphylaxis, fever, hemolysis, non-cardiac pulmonary oedema.

- Non-immunological → Circulatory overload, thrombophlebitis and embolism, bacterial contamination, transmission of disease like malaria, hepatitis, syphilis and AIDS and transfusion siderosis in multiple transfusion.

Management:

- Prevention
- At least 50% of iatrogenic are preventable including >70% of events in ICUs.
- The first step is to identify patients who are at greatest risk.
- Polypharmacy
- Multiple physicians
- Multiple chronic diseases
- Extended hospital stays
- Care management
- Care managers facilitate communication among health care practitioners, ensure that needed services are provided, and prevent duplication of services. They could be employed by physician groups, health plans, or governmental organizations.
- Pharmacist consultation
- A pharmacist can help prevent potential complications caused by polypharmacy and inappropriate drug use.
- Acute care for the elderly units.
- Hospital wards with protocols to ensure that elderly patients are thoroughly evaluated for potential iatrogenic problems before those problems occur for such problems to be appropriately managed.
- Advanced directives.
- Designation of a proxy to make medical decision and advanced directives on care. This can help to prevent unwanted medical treatment who cannot speak for themselves.
- Primary preventions aim to stop iatrogenic disease before it starts, usually by reducing or eliminating risk factors. In secondary prevention, iatrogenic disease is detected and treated at an early stage before symptoms or functional losses occur, thereby minimizing morbidity and mortality.
- Physician should treat the patient after proper diagnosis.
- Drugs & therapeutic procedures should be used consideration of indications, contraindications, and their side-effects.

For avoidance of such events follow the rule of 7 rights.

1. Right medication
2. Right dose
3. Right route
4. Right time
5. Right patient
6. Right information
7. Right documentation

DISORDERS DUE TO DRUG AND FOOD ALLERGY AND THEIR MANAGEMENT AND OTHER ALLERGIC CONDITION

Drug allergy:

A drug allergy is an allergy to a drug, most commonly a medication, and is a form of adverse drug reaction. It is the abnormal reaction of the immune system to a medication. Any medication – over the counter, prescription or herbal – is capable of inducing a drug allergy. A drug allergy is not the same as a drug side effect, a known possible reaction listed on a drug label. A drug allergy is also different from drug toxicity caused by an overdose of medication.

Causes →

When a medication causes an allergic reaction, it is called an allergen.

The following is a short list of the most common drug allergens:

- Antibiotics
- Penicillin
- Sulfa drugs
- Tetracycline
- Analgesics
- Codeine
- Non-steroidal anti-inflammatory drugs (NSAIDs)
- Antiseizure
- Phenytoin
- Carbamazepine

Signs & symptoms of Drug allergy →

Symptoms of allergic reactions can range from mild itching to life threatening conditions.

Many drugs can also cause side effects or intolerances such as an upset stomach. These symptoms do not always indicate a true allergy to a drug.

During an allergic reaction, histamine and other chemicals can cause symptoms that include:

- Hives
- Skin rash
- Itchy skin or eyes
- Runny nose
- Congestion
- Swelling in the mouth and throat
- Difficulty breathing

Anaphylaxis is a rare, life-threatening reaction to a drug allergy that causes the widespread dysfunction of body systems. Signs and symptoms of anaphylaxis include:

- Tightening of the airways and throat, causing trouble breathing
- Nausea or abdominal cramps
- Vomiting or diarrhea
- Dizziness or lightheadedness
- Weak, rapid pulse
- Drop in blood pressure
- Seizure
- Loss of consciousness

Treatment →

Withdrawal of the drug

Injections of antihistamine and corticosteroids, e.g., Inj. Avil (Pheniramine maleate) + Inj. Dexamethasone / Hydrocortisone

Oral antihistamine and corticosteroids

Treatment of anaphylaxis →

Anaphylaxis requires an immediate epinephrine injection as well as hospital care to maintain blood pressure and support breathing.

Food allergy:

A food allergy is an abnormal immune response to food. The signs and symptoms may range from mild to severe. Even a tiny amount of the allergy-causing food can trigger signs and symptoms such as digestive problems, hives or swollen airways. In some people, a food allergy can cause severe symptoms or even a life-threatening reaction known as anaphylaxis.

Food intolerance and food poisoning are separate conditions.

Causes →

While any food can cause an adverse reaction, eight types of food account for about 90 percent of all reactions:

- | | |
|-------------|-------------|
| • Eggs | • Fish |
| • Milk | • Shellfish |
| • Peanuts | • Wheat |
| • Tree nuts | • Soy |

Signs and symptoms →

Symptoms of an allergic reaction may involve the skin, the gastrointestinal tract, the cardiovascular system and the respiratory tract.

They can surface in one or more of the following ways:

- Vomiting and/or stomach cramps
- Hives
- Shortness of breath
- Wheezing
- Repetitive cough
- Shock or circulatory collapse
- Tight, hoarse throat; trouble swallowing
- Swelling of the tongue, affecting the ability to talk or breathe
- Weak pulse
- Pale or blue coloring of skin
- Dizziness or feeling faint

Anaphylaxis, a potentially life-threatening reaction that can impair breathing and send the body into shock; reactions may simultaneously affect different parts of the body (for example, a stomachache accompanied by a rash)

Diagnosis →

Diagnosis is usually based on a medical history, elimination diet, skin prick test, or blood tests for food-specific IgE antibodies.

Treatment →

- To prevent the food allergy, follow the strict diet.
- Total avoidance of the foods identified as allergens.
- If the food is accidentally ingested and a systemic reaction (anaphylaxis) occurs, then epinephrine (adrenaline) should be used.
- A second dose of epinephrine may be required for severe reactions.
- The person should then be transported to the emergency room, where additional treatment can be given. Other treatments include antihistamines and steroids.

[Epinephrine (arenaline) is the first-line treatment for anaphylaxis. If administered in a timely manner, epinephrine can reverse its effects. Epinephrine relieves airway swelling and obstruction, and improves blood circulation; blood vessels are tightened and heart rate is increased, improving circulation to body organs.]

KAYA CHIKITSA

PAPER 1

PART B

1. Detailed description of Chikitsa Sutra and Management of Jwara and its types. Etiopathogenesis & relevant Ayurvedic and Modern management of following types of Fevers-Typhoid, Pneumonia, Pleurisy, Influenza, Mumps, Meningitis, Encephalitis, Tetanus, Yellow fever, Plague, Dengue Fever, Chikun Guniya, Leptospirosis, Viral Fever, Anthrax, Masurika (Small pox), Laghu Masurika (Chicken pox), Romantika (Measles).

DETAILED DESCRIPTION OF CHIKITSA SUTRA AND MANAGEMENT OF JWARA AND ITS TYPES

Jwara

Introduction:

- In ayurvedic literature jwara or fever has been described as ‘sarva rogadhipati’ the commander of all diseases in view of the following characteristics.
- Jwara is considered as the first and foremostly manifested ailment. As such it is termed as – सर्वरोगाग्रजो and बली i.e., powerful because of its intensity.
- Jwara is a wide spread disease manifesting not only in human beings, but also in living creatures.
- Jwara elevates the body temperature considerably, causes severe pains of body, organs and mind.
- Jwara by virtue of its nature occurs at the time of birth and death.
- It manifests as an independent disease entity, as well as a lakshana in many ailments.

Mythological references:

Jwara was originated from the hot and destructive breath of lord shiva, which was produced from his nostrils during the paroxysms of grief and rage on the death of his wife sati.

Synonyms of jwara:

- | | |
|--|-------------------|
| • Takma – that causes hardship and pain. | • Vyadhi |
| • Santapa | • Aatanka |
| • Vikara | • Sheersha shokam |
| | • Vyanga |

Paribhasha:

ज्वलयति संतापयति देहेन्द्रियमनांसीति ज्वरः ।

This derivation explains that jwara induces tapa or pain in the body, organs & minds.

ज्वरस्तु खलुएकएव संतापलक्षणः ।

Santapa i.e., elevated temperature is the one and only lakshana of jwara.

According to sushruta – a clinical condition where in – if sweda-avarodha along with ‘santapa’ and ‘sarvanga grahanam’ is specifically known as jwara.

Nidana:

- Improper or excessive application of therapeutic measures like oleation, fomentation, emesis, purgation, two types of vasti.
- Injuries or trauma
- Ripening of abscesses, ulcer, wounds etc.
- Excessive work, emaciation of body tissues.
- Indigestion or consumption of poisonous substances.
- Asatmya foods, mithyahara and vihara.
- Seasonal changes
- Psychological causes like excessive worry, fear, lust etc.
- Graha related factors, curse etc.
- Infective causative factors (sankramika)
- Improper post-delivery care of ladies, first time milk production etc.

Prodromal symptoms (purvarupas)

- | | |
|------------------|-------------------------|
| • Laziness | • Body aches |
| • Fatigue | • Tastelessness |
| • Anorexia | • Yawning |
| • Tears in eyes | • Heaviness |
| • Mental fatigue | • Depletion in strength |

Vishesha purvaroopas:

Jrumbha → Vataja jvara

Daha → Pittaja jvara

Aruchi → Kaphaja jvara

Common symptoms (samanya roopa):

संतापः सारुचि स्तृष्णा साङ्गमर्दो हृदिव्यथा ।

ज्वरप्रभावो जन्मादौनिधने च महत्त्वं ॥

ज्वरप्रत्यात्मिकं लिङ्गं संतापो देहमानसः ।

ज्वरेणा विशता भूतं न हि किञ्चिन्न तच्यते ॥

Samprapti:

मिथ्याहारविहाराभ्यां दोषा ह्यामाशयाश्रयाः ।

बहिर्निरस्य कोस्थाग्निं ज्वरदाः स्यू रसानुगाः ॥

Nidana sevana → Tridosha prakopa (pitta dominant), combine with rasa dhatu → Agni comes outside from the amashaya, obstruction in svedavaha srotas, spread all over the body → localise whole over body → manifestation of signs & symptoms → types and complication

Jvara upadrava:

कासमूर्छाअरुचिच्छर्दितृष्णातीसारवित्ग्रहाः ।

हिककाश्वासोअन्गमेदश्च ज्वरस्योपद्रवा दशा ॥

Jvara mukta lakshana:

- Sweating
- Lightness of body
- Itching sensation in head
- Stomatitis
- Desire for food

Classification:

Shareera-manasika

According to adhithana or location or seat of origin.

1. Shareera jvara: Shareera jvara is produced in the body as consequence of vitiation of somatic doshas. For instance, in shareera jvara, shamana especially pittashamana drugs are employed.
2. Manasika jvara: Rajas and tamas are afflicted initially under the influence of strong emotional factors, and then inter spread to somatic doshas to effect 'shareera santapa' in addition to 'mana tapa'.

In manasika jvara, priority is given to satvavajaya chikitsa.

Soumya – Agneya

According to causative doshas & factors

1. Saumya means cold, indicates sheetala jvara manifesting due to aggravation / vitiation of cold causative factors.
In this fever patient likes 'ushna ahara'
2. Agneya jvara: agneya jvara is dominated by fiery pitta dosha, with high temperature, daha etc. and patient likes sheetala ahara-vihara.

Antarvega and Bahirvega:

Antarvega jvara	Bahirvega jvara
Antardaha Adhika Trishna Pralapa Bhrama Sandhi asthishula Dosavarcha vinigraha	Adhika santapa on body surface Mild thirst Sukha Sadhya i.e., easily treatable.

Prakruta and vaikruta jvara:

1. Prakruta jvara:

The manifestation of fever or jvara vega in spring and autumn seasons. i.e., during ‘vasanta’ and ‘sharada’ seasons is generally regarded as prakruta or seasonal fevers, as these are easily manageable.

For example:

- The fever caused by kapha dosha in Vasanta or spring times.
- One caused by pitta dosha in autumn or sharad season.

2. Vaikarika jvara:

Fever caused by vata in rainy season should also regarded as prakruta fever, but it is not because it is very difficult to treat as the treatment of fever requires – langhana or fasting measures, which in turn further aggravates vata.

Because of this mutual contraindication between the dosha which has affected the disease and the line of treatment, the type of jvara is difficult to treat.

Sadhya-Asadhya jvara:

- Sadhya: In a person with strong physique, if jvara occurs by vitiation of less amount or number of doshas, and if there is no upadrava or complication then this type of jvara is regarded as ‘sadhya jvara’.
- Asadhya: Asadhya jvara is regarded as asadhya and may lead to death.
Fever caused by many strong etiological factors.
Associated with many signs & symptoms.
Which destroys the sense organs immediately.

Sama – vishama jvara:

- Sama jvara is that fever where in causative factors involved in causation are mild (alpahetu) superficial fever without any complications, having occupied ‘ekasraya’. This type of jvara can be manageable easily as it is laghupaki.

2. Vishama jvara:

The term vishama jvara indicates a group of fevers which have vishamarambha i.e., irregular onset of fever and visharga i.e., remission of temperature.

विषमो विष मारम्भ क्रिया कालोऽनुषङ्गवान् ॥

This vishamatva irregularity is due to lack of strength of vitiated doshas, located in rasa dhatu.

Aetiology:

Remaining of fever inside dhatus very mildly.

Sushruta attributed two factors.

1. Para → indicates infecting cause
2. Svabhava → indicates doshika factors.

Thus, vishama jvara may occur due to exogenous and endogenous causative factor resulting in – nija vishama jvara, agantuja vishama jvara

Samprapti:

Two kinds of vishama jvara:

1. Nija vishama jvara
2. Agantuja vishama jvara

1. Nija vishama jvara

Alpadosha / Leftover dosha after remission of fever + mithya ahara vihara etc. → again dosha vrudhi → sanchaya → production of vishamarambhaka nija vishama jvara.

2. Agantuja vishama jvara:

Para / Svabhavaja / dhatu vaisamyata → leads to production of agantuja type of vishama jvara.

Types:

1. Santata jvara
2. Satata jvara
3. Anyedyuska jvara
4. Tritiyaka jvara
5. Chaturthaka jvara

1. Santata jvara:

The heavy dosha spread all over the body through the rasavaha srotas and stiffened give rise to santata jvara.

In this type of vishama jvara, in which temperature does not come down to normal but persists for seven, ten or twelve days increasing and decreasing at periodic intervals is called 'santata jvara'.

Treatment:

1. Virechana or vasti to clean the bowels.
2. Anti-pyrexia medicine like sahadevi, peetadaru, karavellaka, saptapatra, dronapushpi, Tulasi, kirata tikta etc. should be singularly or in combination may be decocted and prescribed twice daily.
3. Godanti misrana, saptaparna ghana vati are specific drugs.
4. Ayush – 64
5. Ashava kanchuki rasa – cleans the bowels and brings down temperature.
6. Jvara murari rasa is good herbomineral drug in this fever.

2. Satata jvara:

Aggravated dosha, dushya, kala and prakruti are opposite to each other so counter acting factor causes satata jvara which rises and falls according to corresponding time.

In this type of vishama jvara, there is twice rise and fall of temperature within 24 hours. i.e., day & night.

When this double rise of temperature takes a chronic shape i.e., persists for a longer time and there is much loss of rakta dhatu due to destruction of blood cells and spleen is enlarged then it is called 'kala-azar'.

Treatment:

1. Same treatment as mentioned in santata jvara.
2. Specific medicines are guduchyadi kvatha – 30 to 40 ml twice a day.
3. 'Samsamani vati' 250mg tabs four times a day is a proven one.
4. 'Putapaka-vishama jvarantaka lauha' should be prescribed.
5. Jayamangala rasa is also very efficacious in chronic stage.

3. Anyedyuska jvara:

Anyedyushaka jvara is caused by dosha which getting support from one of the factors such as kala, prakruti and dusya obstructs the medavaha srotas in the presence of counteracting factor.

In this type of vishama jvara, there is rise of temperature only once in 24 hours. The rise of temperature is always with rigour and remission precedes perspiration.

Treatment:

1. Godanti misrana, kirata ghana vati, sudarshana ghan vati are given during fever to bring down the temperature and receive thirst, burning sensation etc.
2. Vishama jvarantaka lauha, maha sudarshana churna etc.

4. Tritiyaka jvara:

As a seed lies dormant in the soil for some time and grows up in favourable time, dosha stay in dhatus and get vitiated in favourable time.

In this fever attacks at interval of one day i.e., every third day the rise and fall of temperature is always accompanied with rigour and perspiration respectively.

Treatment:

1. The treatment is just like anyedyuska jvara.
2. The specific drugs are
vishamusthyadi vati
Pancha tikta ghana vati
Brhat sarva jvara lauha

5. Chaturthaka jvara:

In this, the attack of fever is often every fourth day i.e., at the interval of two days fever is always preceded by rigour and fall of temperature is preceded by sweating.

Chaturthaka jvara has two types

- a. Caused by kapha starting from leg.
- b. Caused by vata starting from head.

Treatment:

1. The specific medicines are –

Vishvatapa harana rasa

Chaturthakari rasa

Putapaka vishama jvarantaka lauha

Gudhuchyamalakam musta

Common treatment:

Vatapradhana vishama jvara:

Ghee

Basti

Anuvasana basti

Unctuous and hot food and drinks

Pittapradhana vishama jvara:

Virechana

Milk

Medicated ghee

Bitter and cold things

Kaphapradhana vishama jvara

Vamana

Digestives

Langhana

Ruksha diet, astringent & hot drugs.

Treatment during vega kala

Take large quantity of madya with food then go to bed.

Asthapana basti

Anuvasana basti

After vega:

Dhupa
Nasya
Anjana
Daivavyapasraya chikitsa

Different yogas:

Svarasa → parijata svarasa
Kalka → Lasuna kalka
Churna → sudarshana, drakshadi
Kwatha → panchatiktadi, triphaladi, guduchyadi
Vati → vishama jvaraghni vati, karanjadi vati, guduchyadi modaka
Ghrita → shatpal, dashamulashatpal
Rasaushadha → lakshminarayana, lakshmivilasa, vishveswar, tribhuvanakirti rasa, mallasindura etc.

Bahya chikitsa:

Nasya → purana sarpi
Agatsyapatra svarasa
Anjana → saindhava + pippali + manahshila + taila
Dhupa → astanga dhupa
Maheswar dhupa

Pathyapathya →

Laghu, balya, brimhana, supachya anna
Rakta shali
Godhuma
Mudga yusha
Milk of cow or goat

Nija jvara:

Nija jvara are seven in number, such as –

1. Vataja jvara
2. Pittaja jvara
3. Kaphaja jvara
4. Vata pittaja jvara
5. Vata kaphaja jvara
6. Pitta kaphaja jvara
7. Sannipataja jvara

1. Vataja jvara:

Lakshana:

- Irregular fever
- Loss of sleep
- Sneezing
- Dryness of mouth & body
- Body ache
- Abdominal discomfort

Chikitsa:

Under treatment of samana jvara

However, fasting should not be imposed in vataja jvara, as it may further aggravate vata, instead 'langhana' here should be considered as 'laghu bhojana'.

Hinguleshwara rasa

Godanti misran tablets

2. Pittaja jvara:

Lakshana:

- Always high temperature.
- Diarrhoea
- Bitter taste in mouth
- Thirst
- Fainting
- Stomatitis & rhinitis

Chikitsa:

Pittaja shamana measures should be initiated

Langhana for ama pachana

Shadanga paniya

Tiktadi kvatha

Jvara kesari

Mrityunjaya rasa

3. Kapha jvara:

Lakshana:

- Low grade fever
- Sweet taste in mouth
- No desire for food, anorexia
- Stiffness of body

Chikitsa:

Pippali churna with honey for ama pachana

Chaturbhadra kvatha

Kapha ketu rasa

Tribhuvana kirti rasa

Langhana for long time

Diet prepared with katu, tikta, Kashaya rasa dravya

4. Vata pitta jvara:

Lakshana:

- Fainting
- Burning sensation
- Vertigo
- Headache

Chikitsa:

Mixed treatment as described in vata jvara & pitta jvara, Rasadi vati & mrityunjaya rasa recommended in this type of fever.

Drakshadi phanta

5. Vata kapha jvara	6. Pitta kaphaja jvara
Lakshana Pain in all joints Excessive sleep Heaviness in head Cough	Lakshana Bitter taste in mouth Drowsiness Cough Feeling of burning in body
Treatment Hot water to drink Juice of radish Surasadi phanta Tribhuvana kirti rasa Naradiya lakshmivilas rasa with Tulasi juice	Treatment Langhana Bala kwatha Kasturi bhairava rasa

Sannipataja jvara:

A jvara or fever is called sannipataja when all the three doshas are involved or aggravated in manifestation of fever.

Therefore, all signs and symptoms indicative of vataja, pittaja & kaphaja jvara are found in patient suffering from sannipataja jvara.

According to the predominance of doshas their nomenclature has been fixed in the following 13 names –

1. Vatolbana → vishkaraka
2. Pittolbana → aashukari
3. Kapholbana → kampana
4. Vata pittolbana → babhru
5. Vata kapholbana → sheeghrakari
6. Pitta kapholbana → bhallu
7. Kapholbana madhyapitta hinavata → vaidarika
8. Pitolbana madhyakapha hinavata → yamya
9. Vatolbana madhyakapha hinapitta → krukcha
10. Kapholbana madhyavata hinapitta → karkata
11. Vatolbana madhyapitta hinnakapha → sammohaka
12. Pittolbana madhyavata hinakapha → chakala
13. Tridosholbana → kuchchakala

Treatment:

वर्धनेनैकदोषस्य क्षपणेनोच्छ्रितस्य वा ।

कफस्थानानुपूर्व्या वा सन्निपातज्वरं जयेत् ॥

For treating sannipata jvaras where three aggravated doshas are 'hina,' 'madhyama' and 'adhika'.

The less aggravated dosha should be increased and the one which is aggravated maximum, should be reduced.

This means adhika, should be removed by shodhana chikitsa.

Madhyama should be removed by shamana chikitsa

Sama sannipata jvara means where in all doshas have increased equally.

Charaka advised: always treat kapha dosha and kapha sites first, as ama is produced in amashaya. While sushruta has different opinion, he suggested to treat pitta first because in samprapti of jvara, pitta dosha plays a key role.

However, in other sannipata jvaras, vata must be treated first.

1. Langhana → until 3, 5 or 10 nights
2. Swedana → In vataja jvara: snigdha sveda
In vata – kaphaja jvara: Ruksha valuka sveda
3. Nasya
4. Nishthivana → To extract lina kapha of throat.
Lepa of draksha, madhu & ghrita
5. Avaleha → Astanga avaleha, Chaturanga avaleha
6. Anjana → Shirishbijadi Anjana, lauhachurnadi Anjana
7. Leha → sutavishadi lepa at site of head.
8. Kwatha → Dashamoola kwatha, Bhunimbadi kwatha, Brihatakatphaladi kwatha
9. Rasaushadhis → Mrut Sanjivani vati
Jaymangal rasa
Unmatta rasa
Sannipata bhairava rasa
Hema garbha potali
Lakshami vilas rasa

Madhu nishedha

Sheetajala nishedha

Agantuja jvara:

1. Abhishangaja jvara:

This type of fever is caused by ill attachment with passion, anxiety, fear, anger & by bhuta i.e., bacterial etc. infestation.

Types & features:

1. Kama jvara:
Produced by passion
Symptoms are lethargy, agnimandhya
Treatment – pitta shamana decoctions

2. Shoka jvara:
Produced by anxiety
Symptoms are tears in eyes along with fever
Treatment: awaking kama & krodha
3. Bhaya jvara:
Produced by fear
Symptoms – temperature shoots up suddenly
Treatment – satvavajaya chikitsa
4. Krodha jvara:
Produced by intense anger
Symptoms – headache & tremors
Treatment – providing favoured things.

2. Abhicharaja jvara:

This type of fever is caused by exorcism i.e., mantra, tantra etc.

Symptoms – burning sensation, thirst, vertigo

Treatment – Daivavyapashraya chikitsa

3. Abhisangaja jvara:

It is caused by cursing of brahmin, teacher, saint etc. person.

It manifests abnormal characters.

It should be treated with satvika behaviour divine therapies like homa, japa, dana etc.

4. Abhighataja jvara:

It is produced either after injury, trauma, accident, burns etc. external causes.

Treatment – treat the wounds with various pastes for ropana (healing) followed by vatashamana treatment first, then by pitta shamana drugs.

Different stages of fever:

1. Nava jvara:

Nava jvara is the fever of 1 - 7 days duration.

Taruna javara, ama jvara is synonyms.

Management:

1. Prohibitions:

Patient should avoid sleep during day time, bath, massage, heavy food, sexual intercourse, anger, exercise.

Dhara parisheka, vamana, virechana etc. are also contraindicated.

2. Recommended:

लङ्घनं स्वेदनम् कालो यवाग्वस्तित्तको रसः ।

पाचनान्यविपक्वानां दोषाणां तरुणे ज्वरे ।

1. Langhana
2. Swedana
3. Kala (waiting for 7 – 8 days)
4. Yavagu
5. Bitter medicines
6. Pachana drugs

Langhana is not indicated in jvaras caused by aggravation of vata, fear, anger and grief
According to doshas, fasting indicated is.

1. Vata → 1 day
2. Pitta → 3 days
3. Kapha → 6 days

For svedana purpose, ushna water should be given for drinking with drugs intake.

मुस्तपर्पटकोशीरचन्दनोदीच्यनागरैः ।

श्रूतशीतं जलं दध्यात् पिपासाज्वरशान्तये ॥

Shadanga paniya drink for thirst as well as for nutrition.

Lajamanda yavagu should be given

Bitter drugs like guduchi, katuki, kiratatikta.

Samshamani vati, sudarshana ghana vati 2 tabs thrice a day with hot water or pancha tikta kvatha is ideal one.

2. Jirna jvara:

Fever running beyond 21 days.

Mild to moderate fever

Enlargement of pliha

Dullness of jatharagni

Management:

Intake of milk is especially indicated because of its ‘tarpana’ attributes. Suitable drugs should be added to milk in following order.

Medicinal powder 20 gms +

Milk 160 gms +

Water 640 gms

Subjected to paka, till milk remains & given

If doshas are in pakvashaya – niruha basti is suitable.

Ghrita prayoga with suitable drug is good, as it nourishes the deranged weakened body tissues.

Abhyanga with lakshadi taila, chandanadi taila.

Virechana, vamana avoided if patient is very weak in chronic fevers.

Different yogas:

1. Pravala pishti, Guduchi satva, Sitopaladi churna → all should be combined and given twice a day.
2. Chausata prahari pippali 1gm with honey
3. Putapakva vishama jvarantaka lauha + shrngi bhasma twice a day, with honey for 15 days.
4. In case yakruta, pleeha are enlarged –
Yakrut plihari lauha + mukta sukti
Aaragya vardhini 250 mg tab.
Punarnavadi mandura
5. If there is severe fever → jayamangalarasa 250mg with honey four times.

Punaravartaka jvara:

If an individual who suffered from fever recently, resorts to prohibited factors like consuming vidahi items, guru, astamya, and viruddha i.e., mutually contradictory things etc. before gaining strength then the jvara reappears.

In some clinical instances, doshas undergo paripaka in dhatus gradually and fever subside but their harmful effects continue as a result of which the patient suffers from ‘dinata’, ‘svayathu’, ‘glani’, ‘panduta, loss of appetite etc.

Management:

- The doshas should be eliminated through suitable procedures like –
- Yapana basti
- Yusha
- Mamasa rasa of jangala animals
- Kwatha of kirat tikta, katuki, musta, parpata, guduchi 30 ml thrice a day.
- Putapaka vishama jvarantaka lauha + pravala pisti + guduchi satva given twice a day with honey.
- Sudarshana ghanavati 250mg, thrice a day is very effective.

Dhatugata jvara:

ज्वरे रसस्ये वमनमुपवासं च कारयेत् ॥

सेकप्रदेही रक्तस्ये तथा संशमनानि च ।

विरेचनं सोपवासं मांसभेदः स्थिते हितम् ॥

अस्थिमज्जागते देया निरुहाः सानुवासनाः ।

OTHER INFECTIVE FEVERS

ANTARIKA JVARA / TYPHOID / ENTERIC FEVER

Introduction:

Typhoid fever is an acute illness associated with fever caused by the salmonella typhi bacteria.

Salmonella typhi lives only in humans. Persons with typhoid fever carry the bacteria in their bloodstream and intestinal tract.

Transmitted through the ingestion of food or drink contaminated by the faeces or urine of infected people.

Causes:

Caused by the bacterium salmonella typhi. Ingestion of contaminated food or water. Contact with an acute case of typhoid fever. Water is contaminated where inadequate sewerage systems and poor sanitation. Contact with a chronic asymptomatic carrier. Eating food or drinking beverages that handles by a person carrying the bacteria.

Pathogenesis:

Ingest contaminated food → ingested bacilli invade small intestinal mucosa → taken up by macrophage & transported to regional lymph node → s. typhi multiply in intestinal lymphoid tissue → Intact with enterocytes & ileal peyer's patches during the 1-3 week of incubation period (diarrhoea) → end of incubation period, bacilli enter blood stream (onset of typhoid fever) → bacteria invade the gall bladder, biliary system & lymphatic tissue of bowel & multiply in high number. → Then pass into the intestinal tract.

Symptoms:

Symptoms usually develop 1 – 3 weeks after exposure and may be mild or severe.

1st week:

- Slowly rising of temperature for 4 - 5 days
- Abdominal pain
- Malaise
- Headache
- Constipation

End of 1st week

- Rose spots may appear on the upper abdomen & on the back of sparse.
- Cough
- Splenomegaly
- Diarrhoea

2nd week

- Continuous high fever
- Considerable weight loss
- Extremely distended abdomen

3rd week

Become delirious

Life threatening complications often develops currently

4th week

Improvement may come slowly during the 4th week.

Fever is likely to decrease.

Complications:

Bowel → Perforation, Haemorrhage

Septicaemic foci → Bone & joint infection, meningitis, cholecystitis

Toxic phenomena → myocarditis, nephritis

Chronic carriage → persistent gall bladder carriage

Diagnosis & investigation:

Blood culture

Specific serologic test

Identify salmonella antigens

Widal test and ELISA

Urine & stool culture (2nd & 3rd week)

Bone marrow culture

Punch biopsy samples of rose spots culture

Clot culture

Treatment:

Activity → rest is helpful

Medical care:

Antibiotics: ciprofloxacin

Ampicillin

Azithromycin

Corticosteroids (for severe typhoid fever)

Antipyretics

Diet: fluid & electrolyte should be monitored soft digestible diet is preferable in absence of abdominal distension & ileus.

Surgical care: in case of intestinal perforation

Ayurvedic treatment: (santata jvara)

According to ayurveda typhoid is known as 'manthar jvara'. Food and water which is contaminated by infected mala, mutra, sweda. Eating this contaminated food and water bacteria enters the body and starts growing in intestine & enters in intestine walls which starts imbalance of the rasa, rakta & tridosha.

Ayurvedic herbs and medicines for typhoid.

Bilva phala:

It increases agni and is thus a digestive stimulant.

Works in constipation, indigestion, dysentery

It also helps reduce typhoid fever when given in the early stages.

Jatamansi:

It eliminates impurities in blood.

Guduchi:

In diarrheal & feverish condition.

Symptomatic treatment:

1. For raised temperature:

Tulasi patra svarasa

Adraka svarasa

Nimbapatra Kashaya

Kiratadi sapta Kashaya

Sitopaladi churna

Sudarshana churna

Tribhuvanakirti rasas

Sanjivani vati

2. For headache: godanti + kamadudha rasa

3. For malaise: samsamani vati

Pathyapathya:

Pathya: have light meals, langhana, rest well, consume barley, mudga, old shali

Apathya: avoid eating heavy food like chickpea, don't exercise, don't drink contaminated water.

SHVASSANAKA JVARA / PNEUMONIA

Pneumonia is an inflammation of the lung parenchyma of infective origin.

It is most common infectious cause of death.

It is usually characterized by consolidation.

Consolidation is a pathological process in which the alveoli are filled with a mixture of inflammatory exudate, bacteria & WBC.

Etiology:

Bacteria: streptococcus pneumoniae

Viruses: Influenza virus, adenoviruses, rhinoviruses

Fungi: pneumocystis carini

Types:

Lobar pneumonia: If one or more lobe involved

Bronchopneumonia: The pneumonic process has originated in one or more bronchi and extends to the surrounding lung tissue.

Pathophysiology: 4 stages –

1. Congestion
2. Red hepatization
3. Gray hepatization
4. Resolution

Signs & symptoms:

High fever, shaking chills

Shortness of breath

Increased breathing rate

Chest pain when breathe deeply

Cyanosis

Fatigue and muscle aches

Cough, particularly cough productive of sputum

Complication:

Acute respiratory distress syndrome (ARDS)

Pleural effusion

Respiratory failure

Management:

- Don't smoke
- Practice good hygiene
- Stay rested & fit
- Get a pneumonia vaccination
- Antibiotic, depending on sputum & blood culture
- Oxygen therapy
- Chest physiotherapy

Ayurvedic treatment:

Fever associated with pneumonia is known to be kapha pradhana

Ayurvedic treatment aims at reduction of kapha.

For coughing:

Tulasipatra svarasa

Sitopaladi churna

Lakshmivilasa rasa

Shortness of breath: dashamula Kashaya

Chills: kanakasava

Fever: prataplankeshwar rasa, samsamani vati

PAARHSVA SHOOLA / PLEURISY

Pleurisy refers to inflammation of both layers of the pleurae (parietal & visceral)

Pleurisy is inflammation of the pleura covering the lungs and the chest wall.

Types:

1. Dry pleurisy (Pleuritis sicca)
2. Wet pleurisy (Pleuritis exudative)

Causes:

- Pneumonia (bacterial, viral)
- TB
- Pulmonary infarction, embolism
- Pulmonary abscess
- Upper respiratory tract infection
- Pulmonary neoplasm
- Trauma to the chest wall
- After thoracotomy procedure

Investigation:

Chest x-ray

Sputum examination

Examination of pleural fluid obtained by thoracentesis for smear and culture

Pleural biopsy

Management:

- The objectives of treatment are to discover the underlying cause and to relieve the pain.
- Treatment for the underlying primary disease (pneumonia, infarction); inflammation usually resolves when the primary disease subsides.
- Prescribed analgesics and topical applications of heat or cold for symptomatic relief of pain.
- Indomethacin a non-steroidal anti-inflammatory drug (NSAIDs)
- If the pain is severe, an intercostal nerve block may be required.

Ayurvedic management is same as pneumonia.

INFLUENZA / SANNIPATAJA JVARA

Influenza, commonly called 'the flu' is illness caused by RNA viruses of the family Orthomyxoviridae.

The influenza viruses that infect the respiratory tract of many animals, birds and humans.

Symptoms:

Chills

Body aches, especially in throat and joints

Coughing and sneezing

Extreme fever

Fatigue, headache and nasal congestion.

Complications:

Pneumonia, ear infections
Sinus infection, dehydration

Treatment:

Vaccine:

The 'flu shot' – an inactivated vaccine that is given with a needle, usually in arm.
The nasal spray flu vaccine.

Medications:

Increasing liquid intake, warm showers, and warm compresses, especially in nasal area can reduce the body aches and reduce nasal congestion.
Nasal strips and humidifiers may help reduce congestion, especially while trying to sleep.
Fever can be treated with over-the-counter acetaminophen or ibuprofen.

Ayurvedic treatment is same as pneumonia.

MUMPS / KARNAMULAKA JVARA

Mumps is an acute viral infection of childhood that typically involves swelling of one or both parotid glands, although many different organs can be infected.

Etiology:

Mumps virus, the cause of mumps, is an RNA virus of the genus Rubella virus in the paramyxoviridae family.
Humans are the only natural host.

Clinical features:

Incubation period 14 – 18 days.
Parotitis in 30 – 40 %
Up to 20% of infectious asymptomatic

Complications:

- Meningoencephalomyelitis
- Orchitis
- Epididymitis
- Pancreatitis
- Deafness
- Loss of vision to mild blurring

Treatment:

Supportive & symptomatic treatment
Anti-viral therapy: ribavirin & interferon
Dexamethasone for meningoencephalitis
Diethylstilbestrol for orchitis

Ayurvedic treatment:

For fever:

- Tulasi patra svarasa
- Tribhuvanakirti rasa
- Sanjivani vati
- Samsamani vati
- Adraka svarasa

For headache: godanti + kamadudha rasa + haritaki churna

Disease specific: kanchanara guggulu

External application: dashanga lepa paste locally on gland or kanakalepa

MENINGITIS / MASTISHKA JVARA / MASTISHKAVARANA SHOTHA

Meningitis is an acute inflammation of the meninges.

Caused by either bacteria or virus – Neisseria meningitides

Etiology:

- Bacterial infection
- Viral infections
- Fungal infections
- Cancer
- Trauma to head or spine

Clinical features:

- Fever
- Irritability
- Lethargy
- Poor feeding
- Convulsions
- Brudzinski's sign
- Kerning's sign +ve

Pathophysiology:

Bacteria enters blood stream → enters the mucosal surface → breakdown of normal barriers → crosses the blood brain barrier → proliferation in CSF → inflammation of meninges → increase in ICP (Intra cranial pressure).

Complications:

- Septic shock
- Seizures
- Cerebral oedema
- Hydrocephalus
- Brain damage

Treatment:

Prevention:

- Hemophilus vaccine (HiB vaccine) in children
- Pneumococcal conjugate vaccine.

Management:

Antibiotics for bacterial meningitis

Antibiotics are not effective in viral condition.

Other medications and intravenous fluids will be used to treat symptoms such as brins swelling, shock, seizures

Cephalosporins antibiotics

Ayurvedic treatment:

Treatment of meningitis in ayurveda comprises of both jvara chikitsa and sotha chikitsa.

As it is mainly situated in head and neck areas, kapha dosha is involved.

When infection & fever develops, role of pitta is evident and as this disease affects the CNS.

Role of vata is obvious as this disease involve the vitiation of all three dosha.

Treatment is difficult if not treated properly, the disease will develop into paaka and cause fatal complications.

Samana:

Mild langhana in the beginning for aama pachana.

Then agnideepana with medications and pathya diets.

Lepanam with ruksha dravyas

Swedanam

Dhoopanam

Shodhana:

Vamana, snehana, swedana

Commonly used medicines:

Varanadi kashayama

Kanchanara guggulu

Rasnadi churnam

Guggulu panchapala churnam

ENCEPHALITIS / VATAPITTAJA JVARA / CHAMKI FEVER

Encephalitis is an inflammation of the brain that is caused especially by infection with a virus (such as herpes simplex) or less commonly by bacterial or fungal infection or autoimmune reaction.

Acute encephalitis: Virus that pass into blood stream and then into cerebral spinal fluid leading to destruction of neural cells and inflammation of brain parenchyma.

Post infectious encephalitis: It may result from a viral mediated inflammatory response in the brain following an acute, systemic infection.

Clinical features:

- Fever
- Headache
- Vomiting
- Seizures
- Mental status changes
- Focal neurologic deficits

Emergency signs:

Respiratory distress

Shock

Severe dehydration

Treatment:

Rest

Plenty of fluids

Anti-inflammatory drugs such as acetaminophen, ibuprofen to relieve headache and fever.

Step 1 → rapid assessment & stabilization

Step 2 → clinical evaluation

Step 3 → investigation

Step 4 → empirical treatment

Step 5 → supportive care & treatment

Step 6 → prevention / treatment of complications and rehabilitation

Ayurvedic treatment:

Shadanga paniya

Guduchyadi kashayam

Praval pishti

Kumar kalyan rasa

TETANUS / DHANURVATA

Tetanus is an illness characterized by acute onset of hypertonia, painful muscular contractions, generalized muscle spasms without other apparent medical causes.

Caused by clostridium tetani – gram +ve bacteria

Bacteria enters the body through wound.

The incubation period ranges from 3 – 21 days.

Symptoms:

Tetanic seizures

Stiffness of jaw

Contraction of facial muscles

Fast pulse, fever, sweating

Types:

1. Local tetanus
2. Cephalic tetanus
3. Generalized tetanus
4. Neonatal tetanus

Treatment:

Antibiotics such as penicillin or tetracycline

The toxin is neutralized with shots of tetanus immune globulin

Other drugs may be given to provide relaxation to the muscles and relieve pain.

YELLOW FEVER / PITA JVARA

Yellow fever is an acute flavivirus infection spread by the bite of an infected mosquito.

Yellow fever is common in tropical and subtropical areas of south Africa & Africa

Reservoir – monkey

Symptoms:

Fever, headache, photophobia, malaise

Treatment:

Eradication of aedes mosquitoes

Patients should be hospitalized for supportive care and close observation.

Symptomatic treatment

PLAGUE

Plague is a bacterial infection, in which yersinia pestis is the etiological agent of this disease.

Mostly affects lungs and lymph nodes and blood vessels.

Types:

Bubonic: swollen lymph glands

Pneumonic: lungs

Septicaemic: blood stream

Clinical features:

Sudden onset of fever

Chills, vomiting

Body ache, nausea

Treatment:

Prevention:

Environmental sanitation

Active surveillance

Rodent and vector control by using insecticides

Management:

Basic treatment is antibiotic therapy

Streptomycin is the drug of choice

Gentamycin, doxycycline

DENGUE FEVER / DANDAKA JVARA

Introduction:

Dengue fever is also known as breakbone fever is a mosquito born tropical disease caused by the mosquito bite.

It is caused by the female aedes aegypti mosquito bite, which transmit the dengue virus to human.

Clinical manifestation:

Occur in 3 phases –

1. Febrile phase – 7 days

High fever 40°C

Headache

Bleeding from mucus membrane

A rash occurs in 50 – 80%

2. Critical phase – 2 days

Leukopenia

Thrombocytopenia

3. Recovery phase – 2 – 3 days

Stabilize hemodynamic status

Increase urine output

Overall clinical improvement

Occur in 4 stages:

1. Undifferentiated fever
2. Classic dengue fever
3. Dengue haemorrhagic fever (DHF)
4. Dengue shock syndrome (DSS)

Diagnosis:

Warning signs:

- Worsening abdominal pain
- Ongoing vomiting
- Liver enlargement
- Mucosal enlargement
- High hemocrit with low platelets
- Lethargy or restlessness

Diagnostic test:

Basis on physical examination

Positive tourniquet test

Cell cultures

Nucleic acid detection by PCR

Viral antigen detection

Indirect IgG ELISA

Treatment:

No specific therapeutic agents exist for dengue infections

Bed rest and hydration therapy

Fever control with acetaminophen. Narcotics may be necessary if headaches are very severe.

Monitoring of signs and symptoms for warning signs of DHF or DSS

Drink plenty of fluids

Prevention:

Control of and protection from the bites of the mosquito that transmits it.

Complications:

- Decreased body temperature
- Persistent abdominal pain
- Rapid breathing
- Bleeding gums
- Decrease platelet count
- Cardiomyopathy
- Seizures, encephalopathy & viral encephalitis
- Hepatic injury
- Depression
- Orchitis

Ayurvedic aspects of dengue:

Description of dengue as dandaka jvara is found in Madhava nidana.

There is no specific treatment for disease, ayurveda stresses to strengthen immune system of the body & keeping control on hyperthermia.

Guduchi, Tulasi, sunthi, papaya are commonly available medicinal plants and used to prevent its complications by potentiating immune system so that disease gets controlled within a period of 4 – 8 days.

Leaves of coriander should be taken to reduce fever.

Chyavanprasha can be taken as immune booster.

Punarnava is an herb which helps in flushing out toxins through perspiration.

Amrita satva is advised in dengue fever.

Starting phase – vasa, nimba patra svarasa

CHIKUNGUNYA / SANDHIG SANNIPATTIKA JVARA

Chikungunya is a mosquito borne viral disease transmitted in human by an alpha virus that is spread by the infected 'Aedes aegypti' & 'aedes albopictus' mosquitos.

The word 'chikungunya' means to become contorted as the affected person walks in a stooped posture because of joint pain.

Clinical features:

- Incubation 3 – 12 days
- Fever may rise to 103°F to 104°F with rigors.
- Viremia led to fever.
- Crippling joint pains.
- Lymphadenopathy
- Conjunctivitis
- Maculopapular rash

Diagnosis:

- Isolation of virus
- PCR
- Detection of IgM antibody

Treatment:

- There is no specific antiviral drug against CHIK virus, treatment is entirely symptomatic.
- Paracetamol is the drug of choice with use of analgesics.
- Mild forms of exercise and physiotherapy are recommended in recovering persons.

Ayurvedic management / aspect of chikungunya:

Ayurveda does not recognize chikungunya as a separate entity. The symptoms can be correlated by some of masurika and sannipata jvara

Samprapti ghataka:

Dosha: vata kapha

Dushya: rasa, rakta, mamsa, snayu

Srotas: rasavaha, raktavaha, mamsavaha

Srotodusti prakara: sanga, vimarga gamana

Adhithana: blood stream

Vyadhisvabhava: kasthta Sadhya

Treatment:

1. Fever in chikungunya:

Tulasi leaves are very effective in reducing chikungunya fever. Bilwadi gutika, amritarishta, sudarshanam gutika are the other commonly prescribed ayurvedic medicines for fighting the fever.

2. Muscle & joint pain in chikungunya:

- | | |
|--------------------|---------------------|
| • Triphala guggulu | • Vishtinguka vati |
| • Punarnava | • Sinhanaad guggulu |
| • Yograja guggulu | • Dashamoolarishta |

3. Neutropenia in chikungunya

There is reduction in white blood cells of blood

Suvarna parpati

Ashwagandha

Abhraka bhasma

4. Headache: godanti + kamadudha rasa + haritaki churna

5. Arthralgia:

Nirgundi ghanavati

Shallaki vati

Yogaraja guggulu

Kaisora guggulu

LEPTOSPIROSIS

Leptospirosis is an infectious disease caused by pathogenic bacteria called leptospire, that are transmitted directly or indirectly from animal to humans. (Urine of animal)

It often peaks seasonally sometimes in outbreaks, and is often linked to climate changes to occupation or poor urban slum communities.

Types:

1. Anicteric (most common)
2. Icteric leptospirosis (Weil's syndrome)

Clinical features:

High fever

Headache

Jaundice

Abdominal pain

Treatment:

Leptospirosis is treated with antibiotics which should be given early in the course of disease. Intravenous antibiotics may be required for persons with more severe symptoms.

VIRAL FEVER

Viral fever refers to a wide range of viral infections, usually characterized by an increase in normal body temperature.

It is quite common in children and old people due to lowered immunity.

Symptoms:

- Fever
- Myalgia
- Fatigue
- Painful tonsils
- Burning sensation in eyes
- Headache
- Arthralgia
- Dizziness

Investigation:

Blood test

Viral antigen detection test

Viral DNA / RNA detection test

Treatment:

Complete rest

Anti pyretic medicine

ANTHRAX

Anthrax is caused by the spore forming bacterium – bacillus anthracis

Zoonotic disease in herbivores follows ingestion of spores in soil.

Human infection typically acquired through contact with anthrax – infected animals or animals' product or atypically through intentional exposure.

Clinical forms: 3

1. Cutaneous anthrax:

Depressed black necrotic ulcer

Edema, redness

2. Inhalational anthrax:

Viral like illness, fatigue, fever

Meningitis

3. Gastrointestinal anthrax:

Abdominal distress, bloody vomiting

Oropharyngeal ulcerations

Diagnosis:

Gram stain PCR

Culture of vesicular fluid

Biopsy

Treatment:

Floroquinolones – orally

Doxycycline

Penicillin

MASURIKA

मसूराकृतिसंस्थानाः पीडकाः स्युर्मसुरिकाः ।

Pidika which occurs in size of masura is known as masurika.

Masurika means coppery blisters with burning sensation, fever and pain. It occurs on all over body & face.

Nidana:

Excessive intake of pungent, salty, sour food

Viruddha ahara, adhyasana

Intake of nispava saka

Infections

Types: vataja – pittaja – kaphaja – raktaja – sannipataja

Samprapti:

Nidana sevana → tridosha prakopa occurs by indulgence of nidana → aggravated dosha and rakta spread all over the body. → localised in skin → Many small pidika along with fever and some other symptoms manifest → types & complications

Complications:

Wrist swelling

Pain & swelling at elbow joint

Treatment:

Kusthaghna lepa

Shatadhauta ghrita + dasanga lepa

Treatment of pitta kaphaja visarpa

Patient should stay in cool & clean place

Place should be fumigated by guggulu, nimba patra, jatamansi, devadaru

Take by nimba siddha jala

SMALL POX

Small pox is an acute exanthematous disease caused by infection with the poxvirus variola.

The significant clinical features include:

Three-day prodromal illness characterized by fever, headache, backache and vomiting.

Generalized centrifugal rash that follows prodrome-

- Begin centrally then spread to the extremities and face.
- Rapid succession of papules, vesicles, pustules, umbilication and crusting over a 14 days period.

Treatment:

Vaccination up to 4 days – exposure can prevent clinical symptoms.

Antiviral therapy

Supportive care is the mainstay of smallpox therapy.

Ensure adequate fluid intake.

Treatment of secondary infections

Ayurvedic medicines:

Guggulu dhupana

Dashanga lepa

Chandrakala rasa

Kamadudha rasa

Nimba patra jala snana

Difference between smallpox and chicken pox

Small pox	Chicken pox
Average: 12 – 14 days`	Average: 14 – 16 days
Slow and majestic Scabs 10 – 14 days	Very rapid Scabs in 4 – 7 days
Subsides with appearance of rash, may rise again at the pustular stage	Fever appears with each fresh crop of rash.
Slow	Rapid
More pocks on arms & legs	More pocks on body
Not infectious until rash develops	Most infections in the 48 hours before rash develops

CHICKENPOX

Chicken pox is caused by a virus called varicella zoster.

People who get the virus often develop a rash of spot that looks like blister all over their bodies.

The blisters are small and sit on an area of red skin that can be anywhere and they are of varying size.

Chickenpox also known as varicella.

DNA virus

Most common in winter and spring

Stages:

Incubation period (10 – 21 days)

Prodrome (1 – 3 days)

Vesicles

Pustules

Scabs

Recovery typically 7 days after rash appears.

Symptoms:

Fever

Headache

Myalgia

Itchy, vesicular rash over trunk

Complications:

Meningitis
Encephalitis
Glomerulonephritis
Myocarditis
Varicella pneumonia

Treatment:

For viral infection – acyclovir
Antipyretic medicine
Antihistamines
Ayurvedic treatment same as smallpox.

MEASLES

It is an acute viral infection characterized by a final stage with a maculopapular rash erupting successively over the neck and face, trunk, arms, legs and accompanied by a high fever. The causative agent of measles – measles virus is an RNA virus of the genus morbillivirus in the family paramyxoviridae.

Symptoms:

High fever
Cough
Runny nose
Tiny white spots inside the mouth called koplick spot
Rash from head to toe
After a few days, the fever subsides and the rash fades.

Diagnosis:

History of fever of 3 days with 3Cs. (cough, coryza, conjunctivitis)
Koplick's spot

Complication:

- | | |
|-----------------|----------------|
| • Ear infection | • Pneumonia |
| • Diarrhoea | • Encephalitis |

Treatment:

Measles vaccine
Vitamin A supplements
Good supportive care

Ayurvedic treatment:

Aragvadha phalamajja (for virechana)
Avipatikara churna

ROMANTIKA

This is a relatively simple disease as compare to masurika, occurring in children

Rupa:

Pitta kapha dosha vitiation

Small rashes all over the body

Cough

Fever

Treatment:

Langhana

Mrudu virechana

Symptomatic treatment

Starting phase: Tulasi, nimba patra svarasa, maricha churna

Fever: lakshmivilasa rasa, tribhuvanakirti rasa, kanakasava, samsamani vati

Chills: adraka svarasa

Itching: application of sandal wood

Rasayana: gulkand with praval, chyavana prasha avaleha.

2. Chikitsa sutra and Management of the diseases of Rasavaha Srotas such as – Pandu, Amavata, Madatyaya, Hridroga, Hridshoola, Hypotension, Hypertension, Anaemia, Rheumatoid arthritis.

PANDU

The disease in which skin of the patient becomes pallor is called pandu roga.

Nidana:

Aharaja nidana:

Amla, lavana, kshara, ati ushna, viruddha bhojana, nishpava, masha, tila, vidagdha ati sevana, ekarasa sevana

Viharaja: ativyayama, ati maithuna, diwa swapna

Manasika: kama, chinta, vishama jvara, gulma, rajyakshma, kamala etc.

Samprapti:

Nidana sevana → pitta prakopa, localise in heart → pitta is thrown outside by vata and spread in body through dhamani → localise between skin and mamsa → manifest pandu, haridra varna → types and complications

Purva roopa:

Palpitation of heart burns

Roughness

Absence of sweat and exhaustion

Lakshana:

Karna kshweda – sounds in the ears

Durbala – weakness

Sadana – lethargy

Anna dwesha – aversion towards the food

Shrama – tiredness

Bhrama – giddiness

Gaurava – heaviness of body

Types:

1. Vataja
2. Pittaja
3. Kaphaja
4. Sannipataja
5. Mrida bhakshana janya pandu

Upadrava → aruchi, pipasa, jvara, agnisada, moorcha, klama

Chikitsa:

Snehana

Tikshna vamana

Tikshna virechana

Mrudu virechana – by tikta dravya

After shodhana pathya anna pana should be given.

1. Snehana:

Panchagavya ghrita

Mahatikta ghrita

Kalyanaka ghrita

2. Virechana:

Milk + cow's urine

Trivruta churna + sugar

Triphala churna

3. Vamana:

Yashtimadhu phanta

Milk

Doshanushara chikitsa:

Vata → Sneha

Pitta → tikta and sheetala dravya

Kapha → katu, tikta, ushna dravya

Sannipataja → mixed treatment

Treatment of mrida bhakshana janya pandu:

Tikshna shodhana should be given after accessing patient's bala

Intake of balya aushadha siddha ghrita

Formulations:

- | | |
|--------------------|---------------------|
| • Samshamani vati | • Dhatri lauha |
| • Kanyalohadi vati | • Triphala ghrita |
| • Mandura vataka | • Drakshasava |
| • Yogaraja guggulu | • Punarnava mandura |
| • Navayasa lauha | • Loha bhasma |
| • Saptamruta lauha | • Mandura bhasma |

Anaemia

Anaemia (an – without; emia – blood) is a decrease in the RBC count, haemoglobin and hemocrit values resulting in a lower ability for the blood to carry oxygen to body tissues.

Decrease in RBCs, Hb, Hct level → diminished O₂ carrying capacity → Hypoxia and hypoxia induced effects on organ function → signs and symptoms

Types:

Based on clinical picture:

1. Iron deficiency anaemia → excessive loss of iron
2. Megaloblastic anaemia → less intake of vitamin B12 & folic acid. Red bone marrow produces abnormal RBC.
3. Pernicious anaemia → Inability of stomach to absorb vitamin B12 in small intestine.
4. Haemorrhagic anaemia → excessive loss of RBC through bleeding, ulcers, menstruation
5. Haemolytic anaemia → RBC plasma membrane ruptures. May be due to parasites, toxins, antidotes
6. Thalassemia → Less synthesis of haemoglobin
7. Sick cell anaemia → abnormal, rigid, sickle shaped RBCs. Hereditary blood disorder
8. Aplastic anaemia → destruction of red bone marrow. Caused by toxins, gamma radiation

Symptoms:

- Easy fatigue and loss of energy
- Unusually rapid heart beat
- Shortness of breath
- Difficulty concentrating
- Dizziness
- Pale skin
- Insomnia

Management:

Determine the cause of iron deficiency

Aim of treatment

Lifestyle management

Iron supplements:

Vitamin B12 shots

In aplastic anaemia – blood transfusions

In sickle cell anaemia – oxygen therapy

In haemolytic anaemia – immunosuppressant drugs

AMAVATA

Introduction:

The disease in which both ama and vata are aggravated and affect various kapha sthanas like joints, heart etc. is known as amavata.

Nidana:

Viruddha ahara

Viruddha chesta

Mandagni

Nischalata

Snigdha bhojani vyayama, consuming unctuous oily & high caloric food and immediately getting indulges in exercises.

Samprapti:

Guru-snigdha annapana sevana → agnimandhya → amadosha utpati → aama + vata → circulates the entire body through dhamani → sthanasamshraya at various kaphasthana (trik, urah, hridaya, sandhi) → aamavata

Rupa:

- Body ache
- Loss of taste
- Thirst
- Laziness
- Laziness
- Heaviness
- Fever
- Indigestion
- Oedema on body

Vishesha roopa:

Vatolbana aamavata → teevra sandhishoola, nidra nasha, vibandha

Pitolbana aamavata → atidaha, pipasadhikya, moorcha

Kapholbana aamavata → gaurava, kandu, agnimandhya

Sannipataja → tridoshaja mishrita lakshana

Sadhyasadyata:

Ekdosha → Sadhya

Dwidosha → yapy

Sarva deh achara, sannipatika, with sotha → krichchha Sadhya

Complication:

Sthayi vaikalyata (permanent deformity)

Hridaya vikruti (cardiac disorders)

Stabdha

Gati nasha

Nidra nasha

Bahu mutrata

Chikitsa:

Langhana pachana

Haritaki + sunthi churna

Guduchi + sunthi

Ajamodadi churna

Vaisvanara churna

Trikatu churna

Svedana:

Ruksha valuka sweda: locally for management of pain & stiffness

Nadi sweda

Sarvanga baspa sweda

Patra pinda sveda- in jirna avastha when ama removes

It should be given to reduce vata dosha.

Virechana:

Virechana should be given by following dravya:

Haritaki churna

Eranda bhrusta haritaki churna

Abhayadi modaka

Trivrutadi churna

Eranda taila

Basti:

Niruha basti

Kshara basti

Vaitarana basti

Dashamuladi niruha basti

Erandamuladi niruha basti

Snehapana:

Eranda taila should be consumed with milk mixed with jaggery

Highly praised medicine

Like a lion of forest eranda taila can make the human body free from elephant like amavata.

Samshamana chikitsa:

Rasa aushadhi → aamavatari rasa, malla sindura, godanti bhasma

Vati → Sanjivani vati, chitrakadi vati

Guggulu → sinhanada guggulu, yogaraja guggulu

Churna → pathhyadi churna, trikatu churna

Kwatha → rasnapanchaka kwatha, dashamoola kwatha, pippalyadi kwatha

Lepa → dashanga lepa, nirgundi patra lepa

Rasayana → amruta bhallataka, ashvagandha rasayana

Pathyapathya:

Pathya: sunthi, aadraka, ajamoda, karvellaka, ushnodaka, takra, eranda taila

Apathya: dadhi, matsya, guda, dugdha, viruddha ahara, ratri jagarana, vega dharana

Rheumatoid arthritis:

Rheumatoid arthritis is a chronic systemic autoimmune disease that involves inflammation in the membrane lining of joints and often affect internal organs.

Clinical features:

Early feature (synovitis)

Most affected MCPJ and FIPJ, wrist, tendon sheaths around the joints.

Bilateral symmetrical polysynovitis

Pain, fusiform swelling, stiffness, loss of mobility

Malaise and low-grade fever.

Late features (destructive):

Spread to other joint – wrist, ankle, knee, shoulder

Morning stiffness – improve with activity

Quality of life affected

More later (deformity):

Pain, deformity, instability

Joint deformity

Thumb: Z deformity

Finger: swan neck deformity, ulnar deviation

Wrist: radial displacement

Elbow: limited extension

Knee: swollen, flexion a vulgus

Investigations:

Anaemia – Hb % decrease

Raised ESR

Positive test for RA factors

Positive CRP (chain reactive protein)

X- ray, CT scan, MRI

Treatment:

1. General measures:

Rest

Diet: nutritious, fibrous diet

Correction of anaemia

Moderate exercise

Avoidance of cold

2. Medicines:

Analgesics: acetaminophen, tramadol

NSAIDs: ibuprofen, diclofenac

Disease modifying antirheumatic drug (DMARDs): hydroxychloroquine, methotrexate

Corticosteroids

3. Surgical treatment:

Prosthesis (joint replacement)

Synovectomy

MADATYAYA

Dravyas with tama guna predominance, which destroys the intellect and causes mada and madatyaya are called madya or madakari.

Madya and visha are having opposite qualities of ojas.

Improper or excessive consumption of madya causes severe disease called madatyaya.

Nidana:

Avidhipoorvaka madyapana

Matradhikya madyapana

Prakruti viparita madyapana

Alpa satva

Samprapti:

Nidana sevana → tridosha prakopa → rasavaha, raktavaha, sangnavaha srotodushti → srotorodha → manah kshobha → sangna nasha → mada

Lakshana: smruti vibhramsha, hridaya vyatha, Trishna, parshwa shoola, nidra nasha, bhrama

Avastha bheda:

1. Prathama mada: stage of excitement
2. Dwitiya mada: stage of mental confusion
3. Madantara: stage of delirium
4. Tritiya mada: stage of coma

Complication:

Hikka, chardi, kampa, jvara, paarshwa shoola, bhrama

Chikitsa:

All types of madatyaya are tridoshaja, hence the predominant dosha is treated first.

Kapha sthana is the first dosha that must be treated, later pitta and then vata.

Shamana aushadhi:

Brihata vata Chintamani rasa

Unmada gajankusha rasa

Trikatu churna

Harshini chikitsa:

Alcohol neither cause morbid intoxication without first agitating the mind, nor without affecting the body. Hence treatment that is mentally cheering and enlivening should be given.

Intake of milk

If madatyaya is not cured by any treatment then milk is taken. When patient strengthens milk should be stopped and start less amount of madya so patient will not suffer from dhvamsaka or vikshaya

HRIDA ROGA

According to madhavakara hrida roga means the disease which occurs in heart.

Nidana:

Ati ushna, ati guru, ati amla, ati Kashaya ahara

Ati shrama, abhighata, adhyashana

Ati prasanga (ati vyavaya, sanchintana)

Vega vidharana

Gadatichara – improper or inadequate treatment of other disease.

Ama dosha – excessive ama or toxins in the body.

Samprapti:

Nidana sevana → agni mandhya → sama rasa dhatu utpatti → srotorodha dhamani pratichaya
→ uro ruja → hrida roga

Lakshana:

- | | |
|--------------------------|--------------|
| • Cyanosis | • Polydipsia |
| • Fainting | • Stupor |
| • Fever | • Vomiting |
| • Cough | • Chest pain |
| • Altered taste of mouth | • Anorexia |

Chikitsa:

- | | |
|-------------------------|--------------------------|
| • Nidana parivarjana | • Dhanyakadi kashayam |
| • Vishrama | • Mashadi kashayam |
| • Samanya chikitsa | • Pushkarahwadi kashayam |
| • Effective decoctions: | |

Doshanusara chikitsa:

1. Vataja hridaroga chikitsa:

Vamana with dashamoola kwatha + ghrita + saindhava

Drink sukhoshna taila + sauviraka + mastu + takra + saindhava

Abhyanga with punarnavadi taila / haritakyadi ghrita

Pushkarmooladi choorna

Pushkarmooladi kwatha

2. Pittaja hrida roga:

Pralepa with sheeta virya dravya

Parisechana with sheetala aushadhi

Virechana with draksha + sita + madhu + parushaka

Pitashamaka ahara

Arjuna ksheera paka

3. Kaphaja hrida roga:

- Swedana
- Vamana
- Langhana
- Kaphashamaka ahara
- Shilajatu rasayana

4. Sannipataja hrida roga:

Langhana

Tridosha shamaka ahara

Heena-madhya-ativrudha doshanusara chikitsa

5. Krimija hrida roga:

Shodhana

Krimihara chikitsa – nidana parivarjana, apakarshana, prakruti vighata

Vidangadi churna

Vidangavaleha

Arjuna ghrita

Cardiovascular diseases

Cardiovascular disease is a class of diseases that involve the heart, the blood vessels or both.

Causes:

Congenital heart defects

Coronary artery disease

High blood pressure

Diabetes

Smoking

Excessive use of alcohol or caffeine

Drug abuse

Stress

Some over the counter medications, prescription medications, dietary supplements and herbal remedies

Symptoms:

Chest pain: a sensation of pressure, tightness or squeezing in centre of your chest.

Pain in other parts of the body: it can feel as if the pain is travelling from chest to arms.

Feeling lightheaded or dizzy

Sweating

Shortness of breath

Feeling of nausea

Management:

Lifestyle changes:

These includes eating a low fat and low sodium diet

Getting at least 30 minutes of moderate exercise on most days of the week.

Quitting smoking

Limiting alcohol intake

Managing blood pressure

Managing cholesterol

Managing weight & physical activity

Managing depression

Medication:

Medications to control heart disease.

The type of medication will depend on type of heart disease like –

Anticoagulants

Antiplatelet agents

ACE inhibitors

Angiotensin 2 receptor blocker

Beta blockers

Calcium channel blockers

Cholesterol lowering medications

Diuretics

Vasodilators

Medical procedures or surgery:

Medications are not enough, it's possible to recommend specific procedure or surgery like –

Coronary artery bypass grafting

Maze surgery

Aneurysm repair

Heart transplant

Insertion of pacemaker or (ICD)

HRID SHOOLA / ANGINA

Shoola in the hrid pradesha due to any cause is called hrid-shoola

Nidana:

Apanavata mala mutra vegadharana

Atibhojana

Ajeerna ashana

Adhyashana

Viruddha & asatmya bhojani

Pishtana sushkamamsa sevana

Samprapti:

Nidana sevana → kapha pitta prakopa → vayu margavrodha by kapha-pitta → kupita vayu + rasa dhatu → sthana samsraya in hridaya → hrida shoola

Lakshana:

Chest pain in left side

Difficulty in expiration

Chikitsa:

Like vatavyadhi hridroga chikitsa, oleation and sudation should be given and then emesis should be administered with dashamula kwatha + sneha + saindhava

Sanshodhana → snehana, swedana, vamana, shirodhara

Sanshamana → kasturi bhairava rasa, pravala pisti, arjuna churna, ajunarista

Abhyangartha → karpuradi taila, lakshadi taila

Angina pectoris

Angina pectoris is defined as pericardial pain brought on by effort, emotion or heavy meals, and is relieved by rest.

Types:

1. Stable angina
2. Unstable angina
3. Decubitus angina
4. Variant angina

HYPOTENSION

Hypotension is low blood pressure.

A systolic blood pressure of less than 90 mmHg or diastolic of less than 60 mmHg.

Severely low blood pressure can deprive the brain and other vital organs of oxygen and nutrients, leading to a life threatening condition called shock.

Causes:

- Loss of blood from bleeding
- Low / high body temperature
- Heart muscle disease
- Severe dehydration
- Anaphylaxis

Symptoms:

- Dizziness
- Unsteadiness
- Blurring of vision
- Weakness

Treatment:

- Eat a diet higher in salt
- Drink lots of non-alcoholic fluids
- Get regular exercise to promote blood flow
- Avoid heavy lifted

Ayurvedic aspect:

Bhrama – means giddiness. This is one of the main symptoms of hypotension

Vata vriddhi leading to dizziness

Kapha kshaya can also cause hypoglycaemia

Chikitsa:

- Pandu roga chikitsa
- Vata shamaka chikitsa
- Hridya aushadha
- Santarpana and balya chikitsa
- Panchakarma:
- Snehapana: saraswatha ghrita, Panchagavya ghrita, Kalyanaka ghrita
- Nasya: ksheerabala tailam
- Nitya virechana
- Shirodhara & shirobasti

Medicines:

- | | |
|------------------------|------------------|
| • Sutashekhara rasa | • Amritarishta |
| • Mukta bhasma | • Amalaka churna |
| • Ashwagandha rasayana | • Arjunarista |

HYPERTENSION

Abnormally high blood pressure is called hypertension.

Normal level of blood pressure is 120 / 80 mmHg more than 140 / 90 mmHg in those who are at risk and more than 160 / 100 mmHg in all are considered high BP.

Hypertension is caused by either

1. Increased cardiac output
2. Increased peripheral vascular resistance

Etiology:

1. Essential hypertension → 95 % of cases
2. Secondary hypertension → 5 % of cases
 - Renal disease
 - Endocrine disease
 - Others → pregnancy, steroids

Treatment:

Find and treat the underlying cause

Antihypertensive drugs:

Diuretics → hydrochlorothiazide

Calcium channel blockers → levamlodipine

ACE inhibitors

Angiotensin 2 receptor antagonists

Adrenergic receptor antagonists → beta blockers, alpha blockers

Vasodilators → sodium nitroprusside

Ayurvedic aspect:

High blood pressure or hypertension is a result of abnormal functioning of vyana and udana vayu, ranjaka pitta and avalambaka kapha including loss of their functional integrity and coordination

Hypertension can be compared to a condition called raktagata vata

Chikitsa:

Panchakarma: virechana, basti, raktamokshana

Bahir parimarana: takra shirodhara, ksheera dhara, taila dhara

Single herbs:

- | | |
|---------------|---------------|
| • Sarpagandha | • Arjuna |
| • Lasuna | • Ashwagandha |

Ayurvedic medicines:

- | | |
|----------------------|--------------------|
| • Sarpagandha churna | • Kumaryasava |
| • Brahmi vati | • Kalyanaka ghrita |
| • Guduchi satve | • Pravala pishti |

3. Chikitsa sutra and Management of the diseases of Raktavaha Srotas such as - Raktapitta, Kamala, Kumbhakamala, Halimaka, Daha, Mada, Murcha, Sanyasa, Vatarakta, Plihadosha, Yakrut dosha, Haemolytic disorders, Hepatitis, Cirrhosis of Liver, Leukaemia, Kushta, Shvitra, Visarpa, Sheetaapitta, Udarda, Kotha and Kshudra Roga.

Introduction of raktavaha srotas

Root: yakruta & pliha

Raktavaha srotodusti nidana:

विदाहीन्यन्न पानानि स्निग्धोष्णानि द्रवाणि च ।

रक्तवाहीनि दुष्यन्ति भजतां चातपानलौ ॥

Intake of unctuous, hot and liquid food.

Food and drinks which causes burning sensation

Exposure to sun and fire

Raktavaha srotodushti chikitsa:

Raktapitta hara kriyam – treating on the lines of management of raktapitta

Virechanam, upavasa, rakta mokshana

RAKTAPITTA

“रक्तवत् पितमिति रक्तपितम्” the disease in which rakta gets vitiated due to aggravated pitta is called raktapitta.

Nidana:

Aharaja nidana → ushna, tikshna, kshara, amla, lavana and katu padartha ati sevana, vidahi anna pana sevana, dugdha + lavana & kshara yukta shaka sevana, mulaka, sarshapa, lasuna, sura, sauviraka atisevana

Viharaja nidana → ati atapa sevana, ati vayu sevana, ati adhva gamana, ati vyavaya

Manasika nidana → shoka – bhayadi manasika hetu

Samprapti:

Pitta vardhaka & rakta prakopaka nidana → pitta prakopa → rakta dushti by prakupita pitta → due to pittoshma, mamsadi dhatu vilayana & dravikarana → sravana → urdhva – adho – ubhayamarga → raktapitta

Purvarupa:

- Anga sada
- Sheeta kamata
- Kantha dhumayana
- Vamana
- Loha Gandhi nishvasa

Lakshana:

Doshanushara bheda:

Vataja raktapitta → shyava, aruna, saphena, tanu, ruksha rakta srava

Pittaja raktapitta → krishna, kashayabh, gomutra varna, mechaka, agaradhumabh, anjanabh raktasrava

Kaphaja raktapitta → pandu, sa-sneha, sandra, picchila rakta srava

Dwandwaja → Dwidoshaja lakshana

Sannipataja → tridoshaja mishrita lakshana

Gati bheda:

Urdhwaga → kapha sansrusta, raktapravruti through mukha, nasika, netra, karna

Adhoga → vatanubandhi, raktapravruti through guda, medhra, yoni marga

Abhaya (tiryaka) → vata kapha, raktapravruti through urdhwa / adho marga / roma kupa

Sadhyasadhyata:

Sadhya → ekadoshaja raktapitta, urdhwaga raktapitta, balavana rogi, naveena & alpavega raktapitta, upadrava rahita

Yapya → Dwidoshaja raktapitta, adhoga raktapitta

Asadhya → tridoshaja raktapitta, Ubhaya margi raktapitta, ati vega yukta raktapitta, arishta lakshana

Upadrava:

Daurbalya, shwasa, kasa, jvara, pandu, daha, murccha, trishna, shiro abhitapa etc.

Raktapitta chikitsa sutra:

Stambhana nishedha → Initially, in a strong person (aksheena bala mamsasya), the bleeding process should not be stopped by stambhana chikitsa.

Rakta srava stambhana janya upadrava → If bleeding is stopped it may lead to galagraha, putinasya, murccha, aruchi, jvara, gulma, pleeha, anaha, kilasa, kushtha, visarpa, arsha, bhagandara, mutra kriccha, varna nasha, buddhi-indriyoparodha etc.

In case of santarpanottha raktapitta, and if rogi is balavana, and in bahudosha avastha but nirupdrava (no complication) → the patient should be treated with → sanshodhana chikitsa

Urdhwaga raktapitta → virechana

Adhoga raktapitta → vama

Depending on rogi-roga bala, physician should administer langhana or tarpana in the beginning.

Urdhwaga raktapitta → tarpana & virechana

Adhoga raktapitta → peya & vama

Bala – vrudha – avama – avirechya rogi → shamana chikitsa

In case of severe bleeding even if it is with ama, one should immediately use haemostatic herbs (rakta stambhaka), as the blood is vital tissue in the body.

Raktastambhaka dravya → durva, Usheera, rakta chandana, padmaka, kutaja, kanchanara, bilwa, udumbara, vasa, lodhra, shalmali etc.

Shamana aushadhi →

Rasa aushadhi → rakta pittantaka rasa, pittantaka rasa, bola parpati, shankha bhasma, pravala pishti

Vati → eladi vati, tikshnadi vati

Churna → laksha churna, ushiradi churna, chandanadi churna, atarushkadi churna

Kwatha / asava / arista → atarushkadi kwatha, vasakadi kwatha, Ushirasava, lodhrasava, draksharishta

Ghrita → vasa ghrita, shatavari ghrita

Avaleha / khada → vasa khanda, vasa avaleha, udumbaravaleha

Pathya ahara – vihara:

Purana shali, laja, godhuma, mudga, masura, patola, mulaka, palandu, kushmanda, aja dugdha, godugdha, ghrita, jangala mamsarasa, amalaki, kadali, draksha, mrudwika, mishree, sheeta jala snana, sheeta vihara, chandana lepa, mukta mani dharana, chandra kirana sevana, vamana virechana nasya aadi

Apathya ahara – vihara:

Tila, masha, kulattha, sarshapa, guda, dadhi, kshara, lavana, katu tikshana vidahi annapana, matsya, atapa sevana, Swedana, vegadharana, krodha

KAMALA

Introduction:

Kamala is a term used in ayurveda to describe a disease which resembles jaundice.

Pandu and kamala are said to be the disease which are interrelated. They are also said to be have common origin. Pandu is said to be nidanarthakara for kamala, i.e., when pandu is not treated properly it can lead to kamala.

Thus, kamala can be considered as an effect of untreated pandu or pandu which runs a chronic course.

Pandu and kamala thus cause and effect relationship. Pandu roga and kamala are treated on same principles and same formulations.

Nidana:

If the patient, who is suffering from the pandu takes excessive amount of pitta vitiating diet may develop the kamala.

Ahara

Excessive intake of salty and sour things

Excess alcohol intake

Intake of tikshana things → the blood gets severely aggravated and burns the muscle.

Roopa:

- Haridra netra
- Haridra twak
- Haridra nakha
- Rakta peeta shakrut
- Rakta peeta mutra
- Body looks like frog in rainy season
- Destruction of sense organs
- Daha
- Avipaka
- Dourbalya
- Sadana – tiredness
- Aruchi
- Karshitaha – emaciation

Vishesha roopa:

Shakhashrita kamala → tila pishta nibha varcha

Kosthashrita kamala → raktapeeta shakrut mutra

Samprapti:

Samanya samprapti:

Pittavardhaka padartha sevana by pandu rogi → pitta prakopa → rakta & mamsa dhatu dagdhata → kamala

Shakhashrita kamala:

Nidana sevana → kapha vriddhi → marga avarodha by vriddha kapha → vata prakopa → prakupita vata throws out the pitta towards the shakha → haridra peeta twaka, netra, nakha, mukha & Shweta varna mala → shakhashrita kamala or alpa pitta / ruddhapatha kamala

Kosthashrita kamala:

Nidana sevana → rakta varna durbalta & pitta vriddhi → vriddha pitta spread to koshta & shakha → kosthashrita / bahupitta kamala

Chikitsa:

Pandu roga and kamala will be treated on same lines. The treatment and medicinal formulations are applicable to only those types of pandu and kamala which are Sadhya. Snehana followed by teekshna vamana and teekshana virechana in curable pandu disease.

Mridu tikta virechana in curable kamala.

Kaphapittahara chikitsa

Chikitsa of shakhashrita kamala:

So charaka has mentioned especially some measures to bring dosha from shakha to koshta. The main treatment of shakhashrita kamala needs special emphasis because malaranjaka pitta is situated in shakha therefore virechanadi karma will not be effective till dosha are not brought to the koshta.

When dosha comes to koshta the same treatment given as that of kosthashrita kamala.

Samshamana chikitsa: Done by vata kapha shamana, agnideepana

Single drugs:

- Katuki
- Guduchi
- Bhringraja
- Bhumyamalaki

Compound drugs:

- Arogyavardhini vati 250 mg
- Punarnavadi mandura 125 mg
- Phalatrikadi kwatha 20 – 30 ml
- Triphala churna
- Avipatikara churna
- Dhatyavaleha
- Navayasha loha
- Mandura vataka
- Panchatikta ghrita
- Panchagavya ghrita
- Kalyanaka ghrita
- Kumaryasava

Pathya:

- Ripened papaya fruit
- Draksha
- Wheat
- Jawar
- Ushna, tikshana, katu rasa
- Lekhanakara ahara, bed rest

Apathya:

- Snehana & swedana karma
- Raktamokshana, dhumapana, vega dharana
- Madhura rasa pradhana ahara
- Snigdha, guru, kaphakaraka ahara
- Vyayama, maithuna

KUMBHAKAMALA

Introduction:

Kamala: jaundice

Kumbhakamala: complicated jaundice with abdominal complaints

Haleemaka: chlorosis / hyperchromic anaemia / chronic obstructive jaundice

Panaki: disease presenting with symptoms of both anaemia and jaundice along with raised temperature and loose stools

The stages of kumbhakamala develops when jaundice continues for long.

Symptoms:

Very serious with dark yellow coloured urine, faeces and eyes.

Eyes become deep yellow coloured to red colour with oedema on body

Burning sensation

Hardness of bowels

Loss of power of digestion and consciousness

Treatment:

Ghrita medicated with the juice of draksha, guduchi, and amalaka

Srotanjana + shilajatu + cow's urine

Loha bhasma + madhu

Triphala churna

Arogyavardhini vati

Phalatrikadi kwatha

Dhatravaleha

HALIMAKA

When the body shows deep jaundice as greenish, yellowish, or bluish discolouration due to vata and pitta, the condition is called halimaka.

Symptoms:

Yellowish green coloured body

Person loses his strength as ojas also gets vitiated.

Dyspnoea

Vertigo

Loss of appetite

Loss of sexual drive

Treatment:

Snehana: mahisha dugdha processed with guduchi svarasa.

Virechana: trivrut churna + amalaka svarasa

Ahara: Madhura rasa yukta and pitta nashaka

Basti: yapana basti, ksheera basti, anuvasana basti

Asava & arista: to improve the digestion

Use of Agastya haritaki and abhaya leha according to strength of dosha & agni.

DAHA / PERIPHERAL NEURITIS

Burning of the whole body is known as daha.

Pittaja samanya nidana

Types:

1. Pittaja
2. Raktaja
3. Trishna nirodhaja
4. Madyaja
5. Raktapurna koshaja – asadhya
6. Dhatu kshayaja – asadhya
7. Kshataja
8. Marmabhighataja – asadhya

Samprapti:

Pittavardhak nidana sevana → rakta dusti samanavata prakopa → spread all over body

Localised skin → burning all body

Upadrava:

- Jvara
- Raktapitta
- Daurbalya
- Trushna
- Svasa
- Murcha

Chikitsa:

Pitta samaka chikitsa

Patient kept in cool air conditioning atmosphere

Follow grishma rutucharya

Amalaka churna

Pravala pisti

Chandrakala rasa

MADA

Mada is an excitement stage of mind.

Drugs possessing tamo guna pradhana and cause derangement of the mind are called intoxicants. E.g., sura and other alcoholic beverages

Types: 4

1. Vataja
2. Pittaja
3. Kaphaja
4. Sannipataja

Treatment:

Snehana

Svedana

Panchakarma

MURCCHA

In persons who are emaciated, who have an excess of dosha and who take incompatible diets habitually, particularly in those who are mentally weak, the humours aggravated by the suppression of the natural urges and trauma involve both the external as well as the internal sensory apparatuses and lead to fainting.

Types:

1. Vataja
2. Pittaja
3. Kaphaja
4. Sannipataja

Purvaroop:

Precordial pain, yawning, lassitude

Loss of sensory perception and of strength.

Roopa:

Same as apasmar symptoms

1. Vataja:

To an individual suffering from vatika type of murcha – the sky appears blue, black or red.

Thereafter he becomes unconscious but soon he recovers.

There is vepathu, angamarda, karshya, shyava arunata

2. Pittaja:

To an individual suffering from paitika type of murcha – the sky appears as red, green or yellow.

Thereafter he becomes unconscious and recovers with sweating.

There is trishna, raga, haridra netra

3. Kaphaja:

In kaphaja type of fainting – the sky appears as if raining or as if covered by dark cloud. He recovers after a long time.

4. Sannipataja:

In sannipataja murcha all symptoms of tridosha can be seen.

Same as apasmara difference is that in this patient falls down without disgusting movements.

Murcha → pitta + tama

Bhrama → pitta + vata + raja

Tandra → vata + kapha + tama

Nidra → kapha + tama

Treatment:

- | | |
|--|------------------------------------|
| • Snehana | • Seka |
| • Svedana | • Avagaha |
| • Panchakarma | • Mani dharana |
| • Raktamokshana | • Exposure to wind |
| • Constantly keeping in touch with noble- and strong-minded persons. | • Triphala with honey, ghee, sugar |
| | • Silajatu |

SANYASA

When the extremely aggravated doshas get localized at the vital centres, destroys the function of speech, body and mind.

The patient becomes unconscious and lies down like a wood, as if dead.

This is fatal disease, causes death if not treated immediately

Treatment:

Syncope (sanyasa), does not subside without the administration of proper medicine.

Anjana, avapeeda nasya, dhooma, pradhamana nasya

Various types of strong alcoholic drinks mixed together with other drugs of pungent taste should be carefully put in his mouth frequently.

Matulunga svarasa along with dry ginger and sauvarchala

After the patient regaining consciousness, he should be given light diet.

Thereafter, his consciousness should be maintained by entertainment.

VATA-RAKTA

Vatarakta is a disease explained in ayurveda involving vata dosha imbalance affecting rakta dhatu – blood tissue.

Nidana:

Excessive consumption of lavana, amla, katu, kshara, snigdha, ushna, klinna, shushka ahara

Anupa mamsa

Pinyaka

Moolaka, kulattha, mamsa, viruddha ahara

Adhyashana

Mithya ahara vihara

Samprapti ghataka:

Dosha – vata pradhana tridosha janya vyadhi

Dushya – rakta, twak, mamsa

Agni – mandagni

Udbhavasthana – pakvashaya

Sanchayasthana – sarva sharira

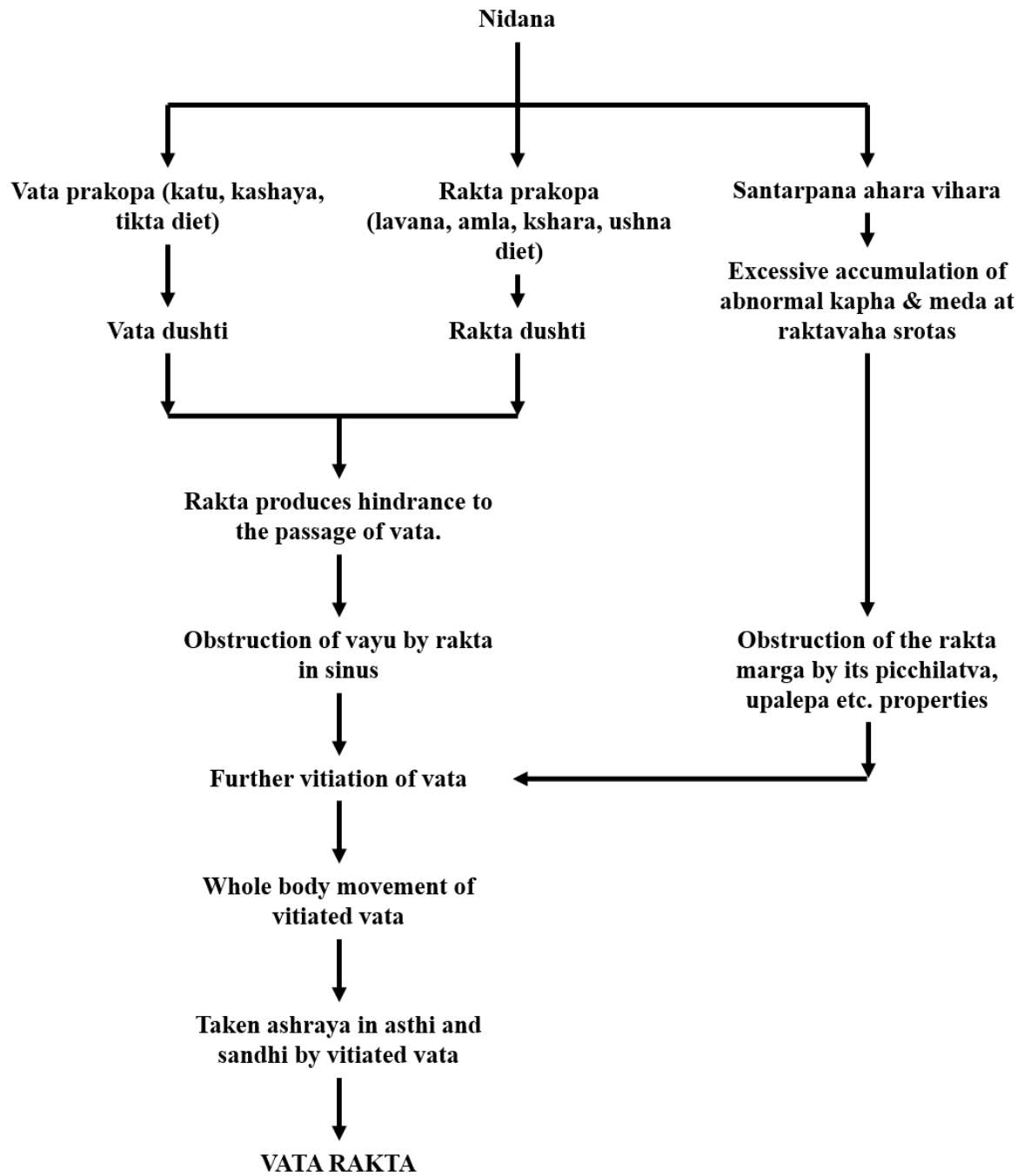
Vyaktasthana – sandhi

Srotas – raktavaha, asthivaha, majjavaha

Srotodushti prakara – sanga, vimargagamana

Roga marga – madhyama

Samprapti:



Types:

Uttana vatarakta	Gambhira vatarakta
Doshas seated only up to twak & mamsa dhatu	Doshas penetrate to deeper dhatus and have complex manifestation
Itching	Severe burning
Coppery, red, black colour	Hard swelling & ulcers
Pricking pain	Painful movements

Upadrava:

Aswapna, arochaka, shwasa, shirograha, hikka, visarpa, paka, bhrama, anguli vakrata, sphota, daha

Sadhyasadhyata:

Ekdosha, nava → Sadhya

Dwidoshaja → yapy

Tridoshaja, with upadrava → asadhya

Chikitsa:

Aggravated vayu enters in various shakha and sandhi causing vitiation of rakta.

Looking into the nature of samprapti and chief factors involved in pathogenesis following could be preferred treatment from ayurveda.

Raktamokshana:

Vararakta as being rakta pradoshaja vikara rakta mokshana with the help of shring, jalauka, suchi, alabu, pracchana, siravedhana according to the dosha and body constitution would be a preferred treatment.

Virechana:

Internal snehana followed by either snigdha virechana, ruksha, mridu virechana such as –

Dharoshna mutrayukta ksheera

Dahroshna ksheera with trivruta churna

Eranda taila with ksheera

Basti is the most appropriate procedure in vatarakta.

Niruha & anuvasana basti both should be repeated simultaneously.

Bahya chikitsa:

Parisheka, abhyanga, pradeha also should be used.

Shamana chikitsa:

Many formulations have been mentioned in our classics for dosha pacification in vatarakta.

Some of them are –

1. Triphala kwatha with madhu.
2. Milk prepared from dashmoola – sadya shoola nivarana
3. Haritaki churna with guduchi swarasa – janugata vatarakta
4. Decoction of amla, haridra, musta with madhu
5. Kokilaksha kwatha
6. Guduchi kwatha with different anupana as per underlying condition.

Ghrita → in vata vikara

Shunthi → amavata

Sharkara → pitta vikara

Eranda taila → severe vatarakta

Madhu → kapha

7. Dashanga lepa
8. Tagaradi lepa

In uttana vatarakta:

- Lepa
- Abhyanga
- Parisheka
- Avagahana
- Upanaha

In gambhira vatarakta:

- Snehapana
- Virechana
- Asthapana basti
- Anuvasana basti
- Ksheera basti

PLIHA DOSHA

Aggravated vata vitiates rakta and produces this disease. Spleen gets enlarged and pain is produced in the upper left quadrant of the abdomen.

Nidana:

Over eating

Excessive travelling or jerking

Excessive activities

Lifting heavy weights

Excessive vomiting

Emaciated by other diseases

Types:

1. Vataja
2. Pittaja
3. Kaphaja
4. Raktaja
5. Sannipataja

Chikitsa:

Nidana parivarjana

Vamabahu kurpabhyantara siravyadha

Shamana aushadhi → pleehari rasa, rohitakadi vati, rohit abhaya kwatha

YAKRITA DOSHA

Yakrita dosha leads to abnormal enlargement of liver which result in palpable lump or swelling in right hypochondrium.

Nidana:

Over eating

Excessive travelling or jerking

Excessive activities

Lifting heavy weights

Emaciated by other diseases

Lakshana:

Tenderness and swelling in right hypochondrium

Swelling may not be visible but enlarged liver can be palpated.

Jaundice, anaemia, anorexia, vomiting etc.

Chikitsa:

Nidana parivarjana

Dakshina bahu kurpabhyantara siravyadha

Shamana aushadhi:

Bhumalaki

Kalamegha swarasa

Vardhman pippali rasayana

Hepatoprotective drugs → bhoomyamalaki, bhoo nimba, katuki, kumari, rohitaka etc.

HAEMOLYTIC DISORDERS

Bleeding disorders (Coagulopathy):

- Bleeding disorders can be inherited or acquired. Some bleeding disorders can occur due to conditions such as thrombocytopenia, anaemia, vitamin K deficiency, leukemia, cirrhosis of liver and HIV.
- They can also result from certain medications that are used to thin the blood, including antiplatelet and anticoagulant medications. e.g., Aspirin, Clopidogrel (antiplatelet), Warfarin (anticoagulant) etc.
- Examples of inherited bleeding disorders include Hemophilia A, Hemophilia B, and von Willebrand Disease.

Clinical Features →

Bruising – Petechial bleeding – Nosebleeds (Epistaxis) – Earbleeds (Otorrhagia) – Bleeding gums – Hematemesis – Hematuria – Melina – Menorrhagia – Excessive bleeding following surgery etc.

Investigations →

CBC (Low platelet level – thrombocytopenia)

BT CT or Prothrombin time (increased)

Treatment →

- Treat the basic cause of haemorrhage.
- Maintain Fluid & Electrolytes balance with IV Fluids.
- Plasma expanders or Blood transfusion (as indicated).
- Haematinic & Hematopoietic drugs.
- Injection vitamin K

HEPATITIS

Hepatitis is a broad term that means inflammation of liver.

It is most commonly caused by viruses also be caused by drugs, chemicals, auto immune diseases and metabolic abnormalities

Five types of hepatitis have been identified: hepatitis A, B, C, D, E.

Hepatitis A is always an acute, short-term disease, while hepatitis B, C, D are most likely to become ongoing and chronic. Hepatitis E is usually acute but can be particularly dangerous in pregnant women.

Sign & symptoms:

- | | |
|------------------|--|
| • Fatigue | • Weight loss |
| • Fever | • Sharp pain in right upper quadrant of abdomen. |
| • Abdominal pain | |

Management:

- | | |
|--|-----------------------------|
| • Rest according to patient's level of fatigue | • Antiemetic drugs |
| • Hospitalization | • Complications |
| • Vitamin K injection if pt. is prolonged. | • Dehydration, hypokalemia |
| • IV fluid & electrolyte replacement. | • Chronic carrier hepatitis |
| | • Liver cirrhosis |
| | • Hepato cellular carcinoma |

LIVER CIRRHOSIS

Cirrhosis of liver is a chronic progressive disease characterized by widespread fibrosis and nodule formation

The development of cirrhosis is an insidious, prolonged course, usually after decades of chronic liver disease.

It is a chronic disease in which there has been diffuse destruction and fibrotic regeneration of hepatic cells.

As necrotic tissue is replaced by fibrotic tissue normal liver structure and vascular is altered, impairing blood & lymph flow.

It results in hepatic insufficiency and portal hypertension.

Clinical features:

Hepatomegaly

Portal hypertension

Ascites

Spider naevi around the face, neck, shoulder

Hypoalbuminemia

Terry's nails: proximal 2/3 of the nail plate appears white with distal 1/3 red due to hypoalbuminemia.

Gynecomastia

Hypogonadism

Splenomegaly

Bruising & bleeding resulting from decreased production of coagulation factors

Hepatic encephalopathy

Laboratory investigation:

Alkaline phosphatase – usually slightly elevated

Bilirubin – elevated

Prothrombin time – increased

Complications:

Ascites

Oesophageal varices

Hepatic encephalopathy

Spontaneous bacterial peritonitis

Management:

Antibiotic – for infections

Laxatives, such as lactulose, decrease risk of constipation

Get vaccinated against hepatitis B

Ayurvedic management:

Rasa & rakta dhatus are known to be intoxicated in this liver problem and in turn other dhatus become weak. All the functions of pitta get affected. Functions include digestion of food, hunger feeling, blood production and complexion of skin as well.

There are excellent herbs that are recommended in ayurveda to help in the treatment of liver cirrhosis –

Katuki

Bhringaraja

Bhumyamalaki

Rohitaka

Punarnava

Bhoonimba are some liver tonic drugs.

Formulations such as –

- Pippali vardhamana rasayana
- Katuki churna
- Bhumyamalaki churna
- Bhringaraja churna
- Arogyavardhini vati
- Rohitakarista

Apart from internal medication, if there is severe imbalance of the doshas, pancha karma treatments like virechana is prescribed to eliminate the excessive pitta dosha. Vamana may also give in case of an aggravated kapha dosha. Expelling the excessive kapha & pitta dosha helps in activating metabolism.

Ushnodaka basti for constipation

Patient must be on only milk diet.

LEUKAEMIA

It is a group of malignant disorder, affecting the blood and blood forming tissue of the bone marrow lymph system and spleen.

Etiology:

Genetic and environmental factors

Chromosomal changes (down syndrome)

Chemical agents, chemotherapeutic agents

Radiation

Types:

Based on the types of WBC.

Acute myelogenous leukaemia (AML)

Acute lymphocytic leukaemia (ALL)

Chronic myelogenous leukaemia (CML)

Chronic lymphocytic leukaemia (CLL)

Clinical features:

Symptoms may include bleeding and bruising problems, feeling tired, fever, and an increased risk of infections.

These symptoms occur due to a lack of normal blood cells.

Diagnosis is typically made by blood tests or bone marrow biopsy

Treatment:

Some combination of chemotherapy

Radiation therapy

Bone marrow transplant

KUSTHA

Definition:

The disease in which blood of body gets vitiated

कुष → to extract

कु → bad, ill

स्थ → being, staying

Which causes discolouration of the skin is known as kustha. After some time, body become ugly due to kustha.

Nidana:

Intake of wrong food combinations

Suppression of the urge

Doing physical exercise in excessive heat and after a heavy meal.

Use of cold water immediately after exposure to scorching sun heat.

Intake of excess food, uncooked food and intake of food before the previous meal is digested.

Improper administration of panchakarma therapies.

Excessive intake of masha, mulaka, tila, guda

Sleep during day time

Sinful acts

Insult of brahmans and guru

Purvarupa:

Loss of sensation of touch

Excessive sweating

Discolouration of the skin

Itching, pricking pain, mental fatigue

Burning sensation & numbness

Samprapti:

Nidana sevana → tridosha prakopa which vitiates tvaka, rakta, mamsa and lasika → vitiated dosha leave their own site and spread all over the body → localise in the skin → manifests the symptoms → types & complication

Types:

Mahakushtha:

1. Kapala
2. Udumbara
3. Mandala
4. Rushyajihwa
5. Pundarika
6. Sidhma
7. Kakanaka

Lakshanas:

1. Kapala kustha:

Colour – krishna, aruna

Nature – similar to broken piece of earthen pot.

Touch – ruksha, parusha, tanu

Associated symptoms – severe pain

2. Udumbara kustha:

Colour – similar to udumbara fruit

Nature – redness, hair on the patch become brown

Associated symptoms – burning sensation, pain

3. Mandala kustha:

Colour – white and red

Nature – sthira, ghana, snigdha, elevated round patches

Associated symptoms – patches are matted.

4. Rishyajihva kustha:

Colour – red in edges and brown inside

Nature – rough, it resembles the tongue of rasya.

Associated symptoms – pain

5. Pundarika kustha:

Colour – white with red edges

Nature – resembles lotus petals, elevated patches

Associated symptoms: burning sensation

6. Sidhma kustha:

Colour – white coppery, colour resembles flowers of alabu

Nature – thin

Associated symptoms – mostly on chest

Particles resembling dust are observed

7. Kakanaka kustha:

Colour – resemble gunja

Nature – does not get suppurated

Associated symptoms – pain and incurable

Kshudra kustha:

1. Eka kustha →

Looks like scales of a fish

Absence of sweating in affected area

2. Charmakhya →

Skin looks like the elephant's skin

Spreading in the vast area.

3. Kitibha →

The colour of affected skin is dull black

Skin rough and very much dry.

4. Vipadika →

Cracking of feet or hands.

5. Alasaka →

Skin is full of itching and red papules

6. Dadru →

It is accompanied with itching redness, pimples

Circular in shape and elevated on the bladder.

7. Charmadala →

Red with itching

Attended with eruption

Intolerance to touch

8. Pama →

Whitish, reddish or dull black rashes on the affected skin area with severe itching

Affected skin area with severe itching

9. Visphotaka →

Whitish or reddish papules with thin skin over affected skin area.

10. Shataru →

Colour of the affected skin is red or dull black

Multiple scars over affected area.

11. Vicharchika →

The affected area is dull black in colour with rashes along with profuse discharge

Prognosis:

A wise physician must not undertake the treatment of following types of patients suffering from kustha.

1. The patient of kustha with the signs & symptoms all the 3 vitiated doshas.
2. The patient who is weak
3. The patient who is suffering from thirst, burning sensation
4. The patient having no digestion strength.
5. The patient having maggots in the patches of kustha.

Chikitsa:

All types of kustha are caused by tridosha hence the treatment is given according to predominance of dosha.

Shodhana;

Vatapradhana kustha → ghritapana

Kaphapradhana kustha → vamana karma

Pittapradhana kustha → raktamokshana, virechana

Alpa dosha kustha → pracchana

Gambhira kustha → siravyadha

Acharya sushruta says that

Avapidana nasya once in 3 days

Vamana karma once in 15 days

Virechana karma once in 1 month

Raktamokshana once in 6 months.

Kustha patient with more vitiated doshas is given shodhana therapies for several times with a lot of care.

Excessive elimination of doshas might weaken the patient and the aggravated vata might endanger patient's life instantaneously.

After the elimination of doshas from the gastro-intestinal tract and raktamokshana from blood, the patient is given Sneha to drink.

Vamana should be done when dosha are in utklista stage. Vamana should be done by kutaja, madanphala, madhuka etc.

Virechana – trivruta, danti and triphala

Niruha basti – darvi + bruhati + patola + kritamala Kashaya

Anuvasana basti – after virechana and niruha basti. Madanphala + madhuka + nimba + patola siddha sneha

Nasya – saindhava + danti + maricha

Dhumapana – vairechanika dhumapana

Raktamokshana:

The patches of kustha which are stable, hard and rounded, is subjected to prastara and nadi type of svedana and rubbed with a surgical brush. The blood oozing out through this process should thereafter be eliminated.

In alpadoshayukta kustha, blood is eliminated by scratching patches and by applying horn, alabu & jalauka.

Shamana chikitsa:

Pradhana aushadhis: gandhaka, nimba, katukapittha taila, bakuchi, hartal, khadira

1. Rasa aushadhi: talakeshwar rasa, suddha gandhaka, gandhaka rasayana, swarnamakshika bhasma, kustha kuthar rasa
2. Vati / guggulu: aarogyavardhini vati, yogaraja guggulu
3. Churna: panchanimba churna, manjisthadi churna, triphaladi churna
4. Kwatha: mahamanjisthadi kwatha, khadirashtaka kwatha, khadirarista, kanakabindarista
5. Ghrita / taila: panchatikta ghrita, kanakksheeri taila, mahatiktaka ghrita, karanja taila
6. Avaleha: amruta bhallataka leha, bhallatakavaleha

Bahya praoygartha:

- Kusthadhya taila
- Kanakaksheeri taila
- Sarshapa taila
- Khadira sara taila
- Kusthadi lepa
- Manahshiladi lepa
- Karanjadi lea
- Chaturvidha kusthanashaka lepa (shirisha twaka, karpasha pushpa, aaragvadha patra, kakmachi)

SHWITRA

Nidana

- Viruddha ahara
- Chardi vega dharana
- Atibhojana
- Atyamla, lavana, Madhura, katu rasa sevana
- Navana, dadhi, matsya bhakshana
- Vipra guru gharshana
- Papakarma

Lakshana:

Shvitra starts with a white patch anywhere on the body, and then it spreads gradually white pigmentation of the skin in characteristic features of shvitra.

It is non infection and non-contagious skin disease

Types:

1. Daruna
2. Charuna
3. Kilasa

Samprapti:

Due to atisevana of asamyak ahara vihara, vitiation of tridoshas occur in association with twakgat pitta dosha and rasa-rakta mamsa udaka dhatu. When the vitiation is significantly at the level of rasa and rakta it results in shwitra kustha.

Prognosis:

Sadhya lakshana → newly developed and colour of hair on the patches is not changed then it is curable.

Asadhya lakshana → chronic (more than 1 year) and lips & finger tips are affected then it is incurable

Chikitsa:

Vamana & virechana

After snehana → kakodumbar svara with guda is given for sansrana → afterwards patient should be exposed to sun.

Bakuchi taila, khadira kwatha, manahshiladi lepa etc.

Shvitra is considered as the disease caused by sinful acts, therefore it should also be treated with daivavyapashraya chikitsa.

Vrata, seva, dana, dharmika anusthana, bhaskara puja

Shamana aushadhis:

- Talkeshwara rasa
- Switrari rasa
- Gandhaka rasayana
- Manjisthadi churna
- Kusthahara taila
- Swarna makshika bhasma
- Aarogyavardhini vati
- Kaishor guggulu
- Khadira kwatha
- Kusthahara lepa

Difference between kushtha & shwitra

Kushtha	Switra
Srava yukta vyadhi	Srava rahita asankramaka vyadhi
Also, krimijanya	Krimi abhava
Tridoshaja vyadhi	Mostly ekdoshaja
Rasadi saptadhatu dusti	Rakta, mamsa, meda dhatu dusti

VISARPA

Visarpa means which spread in various ways or it is name as parisarpa due to its extensive spreading.

Nidana:

- Excessive intake of sour, salty, pungent and hot things
- Dadhi, sukta, sura, sauviraka
- Excessive intake of tila, masha, kulattha
- Divasvapna
- Excessive work
- Traumatic injury
- Due to contact with poison
- Burn in fire.

Lakshana:

- Localised spread
- Painful blisters
- Malaise
- Jvara
- Burning sensation
- Itching
- Fatigue
- Numbness

Sapta dushya:

- | | | | |
|----------|----------|----------|-----------|
| 1. Vata | 3. Kapha | 5. Rakta | 7. Lasika |
| 2. Pitta | 4. Rasa | 6. Mamsa | |

Types: 7

1. Vataja visarpa: ruksha, shyama, aruna varna
2. Pittaja visarpa: tamra harita peeta krishna varna
3. Kaphaja visarpa: sweta pandu, kruchchrapaki spota
4. Sannipataja visarpa: sarvadhatu vyapi
5. Aagneya visarpa: (VP) agnidagdha samana sphota
6. Kardama visarpa: (PK) kunapagandhi
7. Granthi visarpa: kruchchra paki granthimala

Chikitsa:

Visarpa should be promptly attended by the below said measures

Langhana → to rectify metabolism

Rukshana → to remove excess and unnecessary fluidity in the body

Virechana → expelling the morbid pitta and reduce the inflammatory process in body

Vamana → expelling vitiated kapha. Reduce excess kleda & unwanted fluidity

Lepa → recovery process and to heal lesions

Seka → sprinkling over the blisters to heal.

Raktamokshana → remove the contaminated blood.

As rakta is the site of visarpa, among all the treatments raktamokshana is the best.

Doshanusara chikitsa:

Sama dosha in kaphasthana → langhana, vamana, tiktarasa yukta aushadha

Sama dosha in pittasthana → langhana, vamana, virechana, raktamokshana

Sama dosha in kapha sthana → virukshana chikitsa

Granthi visarpa chikitsa → rukshana, pradeha, raktamokshana with siravyadha or jalauka

Shamana ausadhi:

- | | |
|----------------------------|-----------------------|
| • Gandhaka rasayana | • Panchatikta ghrita |
| • Arogyavardhini vati | • Mahatikta ghrita |
| • Keshor guggulu | • Pancha twagadi lepa |
| • Chandanadi kwatha | • Dashanga lepa |
| • Laghupanchamuladi kwatha | • Karanjadi taila |
| • Khadirarishta | |

SHITA PITTA

Exposure to cold, suppression of natural urges and other reason cause vitiation of kapha and vata. Then vitiates pitta and then produces rash on the skin, which is called as sheetapitta.

Nidana:

Sheeta vayu sparsha

Chardi vega dharana

Vamana karma ayoga

Asatmya, viruddha ahara sevana

Gandupada Mukhi upasarga

Lakshana:

- | | |
|---------------------------------|----------------------|
| • Rash on the skin with itching | • Pain |
| • Burning sensation | • Vomiting and fever |

Samprapti:

Nidana sevana → kapha vata prakopa → combines with prakupita pitta → sthanasamshraya

→ shotha → sheetapitta

Sapeksha nidana:

Sheetapitta	Udarda	Kotha
Vata pradhana	Kapha pradhana	Pitta kapha pradhana
Adhika toda	Kandu & vamana	Adhika kandu
Kinchit mandala utpatti	Aavsthika mandal utpatti	Aavasthika raktanna mandala utpatti
Aashukari (acute)	Subacute	Jeerna (chronic)
Produced by consuming sheeta and ushna together.	Appears in shishira rutu	Due to ayoga of vamana

Chikitsa:

Samshodhana chikitsa:

Vata: abhyanga

Pitta: virechana, raktamokshana

Kapha: vamana

Krimi, dadru and kusthanashaka treatment

Abhyanga → sarsapa taila

Svedana → usnodaka seka

Vamana → by patola, nimba, vasa

Virechana → by triphala, pippali

Udvartana → sarsapa + haridra + chakramada seeds

Intake of ajmoda along with jaggery

Rakta mokshana – after pana of mahatikta ghrita

Shamana aushadhis:

- Sutashekhara rasa
- Pravala bhasma
- Arogyavardhini vati
- Kaishor guggulu
- Trikatu churna
- Panchashirisha churna
- Manjistha arista
- Durvadi lepa

UDARDA

Vata is predominant in sheetapitta, whereas kapha is predominant in udarda. There will be more pain in sheetapitta and more itching in udarda. (Kanduyukta shotha)

KOTHA

Kotha is caused by improper administration of vamana.

Characterized by (kanduyukta rakta sotha)

KSHUDRA ROGA

The disease is known as kshudra roga due to their less etiological factors, symptoms and treatment.

Sushruta Samhita – 44

Astanga hridaya – 36

Some examples:

- Ajagallika → eruptions occurring in children
- Yavaprakhya → barley shaped eruption in muscles
- Andhalaji → big sized eruptions
- Kachchhapika → hard elevated eruptions
- Valmika → cystic swelling over neck
- Pashanagardabha → hard swelling in lower jaw joint.
- Agnirohini → eruption occurring armpit.
- Chippa → painful swelling hard of nailbed
- Kadara → painful hard swelling at sole of foot
- Darunaka → hard eruptions over the scalp
- Arunshika → small, oozing blisters at scalp
- Yauvan pidika → eruptions on face
- Padmini kantaka → round elevated swelling with thorny eruption
- Mashaka → painless, hard, elevated mole
- Tilakalaka → black coloured spots like sesame
- Nyachchra → white or grey coloured spots
- Avapatika → cracks appearing over foreskin of penis
- Sannirudha guda → narrowing of anal passage
- Guda bhramsha → prolapse of anus

4. Knowledge of National Health Programmes and the relevant Ayurvedic Management of the following diseases enlisted by World Health Organisation- Malaria, Filaria, Kala Azar, Leprosy, Tuberculosis, AIDS.

NATIONAL HEALTH PROGRAM

MALARIA

Malaria is a mosquito-borne vector disease affecting humans and other animals caused by parasitic protozoans belonging to the plasmodium protozoans belonging to the plasmodium type.

Eradication programme of malaria:

To combat devastating effects of malaria, the national Malaria Control Programme (NMCP) was launched in 1953 built around three key activities.

1. Insecticidal residual spray with DDT.
2. Monitoring and surveillance of cases.
3. Treatment of patients

Within 5 years, the program helped to dramatically reduce the annual incidence of malaria. Encouraged by this, a more ambitious National Malaria Eradication Programme (NMEP) was launched in 1958. This further reduced the number of malaria cases and eliminated deaths from the disease.

In 1999 the Govt. of India decided to drop the term NMEP and renamed it as national antimalarial program (NMAP).

National Filaria Control Programme (NFCP)

The filariasis is caused by parasitic nematodes (worms) – *Wuchereria bancrofti*, which is transmitted by the bites of infected mosquitoes (*Culex*, *Anopheles* & *Aedes*) to humans. Filariasis is characterized by lymphangitis, lymphadenitis, and elephantiasis of genitals, legs and arms.

1995: National filaria control programme (NFCP) was launched.

Objectives of NFCP →

- Reduction of the problem in un-surveyed areas.
- Filariasis control in urban areas through anti-larval & anti parasitic measures.

Control strategy:

- Vector control through anti-larval spray / application of appropriate larvicides at weekly intervals.
- Biological control through larvivorous fishes.

- Antiparasitic measures through diagnosis & treatment of microfilaria carriers and cases.
- IEC → Information, Education & Communication to generate community awareness.

Treatment of filarial →

- DEC (diethyl carbamazine) + albendazole or Albendazole + Ivermectin
- Doxycycline

Ayurvedic management →

The lymphatic filariasis of conventional system of medicine is very near to Shlipada of Ayurveda. Ayurvedic drugs are found effective in the prevention & cure of early cases of filariasis →

- Nityananda rasa – 2-tab (500mg each) TID for 2 weeks
- Saptaparna ghanavati – 2-tab (500mg each) TID for 2 weeks
- Ayush-55 – 2-tab (500mg each) TID for 2 weeks
- Sudarshana churna – 3 gm TID with warm water after meal
- In order to reduce swelling, drugs like Gomutra-Haritaki, Punarnavadi guggulu, Gokshuradi guggulu are used.
- Bloodletting with the application of Jalauka is also found effective.

KALA AZAR CONTROL PROGRAMME

Kala-azar is a chronic disorder, which is caused by an intracellular protozoan; known as Leishmania species. It is transmitted to human by bite of female phlebotomus sandfly. The classical presentation of Kala-azar → fever, splenomegaly and hepatomegaly associated with anaemia, weight loss & weakness.

Post Kala-azar dermal lesions may occur after the apparent cure of systemic disease. If untreated it may be fatal.

1990-91: Kala-azar control programme (NFCP) was launched.

2010: It was presumed that India become free from Kala-azar by the year 2010. But in clinical set up many cases are now reported in the successive years.

Strategy for control of Kala-azar →

Interruption of transmission by reducing vector population through indoor residual insecticides.

Early diagnosis and complete treatment of Kala-azar including PK 39 rapid diagnostic kits and oral drug Miltefosine for their treatment.

Ayurvedic management →

The following ayurvedic drugs are helpful in prevention & cure of early cases of Kala-azar →

- Tamra bhasma – 60 mg BD with honey, after meal.
- Yakritaplihari Lauha – 150 mg with honey, after meal.
- Rohitakarishtha or Amritarishta 40 ml BD with equal quantity of water, after meal.
- Drugs like Godanti bhasma, Svarna gairika, Tribhuvana kirti rasa can be used alone or in combination with above drugs.

National Leprosy Eradication Programme: (NLEP)

Leprosy is caused by *Mycobacterium leprae*. In Vedic references leprosy is mentioned as kushtha roga. It has the maximum social stigma. There are many misconceptions about disease like past sins, hereditary and incurability etc. that causes social aversion & ostracism against leprosy patients leading to the high deformity. Now by the scientific inventions leprosy has been identified as infectious disease; which can be cured & eradicated.

Programme related to leprosy →

The establishment of the Indian council of British Empire leprosy relief association was in 1925, which laid the foundation of organized leprosy work in India. After Independence, this association of renamed as Hind Kushtha Nivaran Sangha in 1974. Followings are the Landmark of Leprosy eradication programme →

1955: National Leprosy Control Programme was established → Dapsone as monotherapy was the back bone of NLCP.

1982: Multidrug therapy (MTP) came into use.

1983: Govt. of India launched the National Leprosy Eradication Programme (NLEP) with the objective of eliminate leprosy as public health problem by the year 2000 AD.

Objectives of NLEP →

- Early detection and treatment
- Interrupting transmission
- Prevent deformities
- Eradicate leprosy

Treatment plan →

MDT (Rifampicin, Clofazimine, & Dapsone) is available free of cost on all working days at all state centres, PHC, Govt. dispensaries and hospitals.

Ayurvedic management → Kustha chikitsa should be adopted with assessment of dosha and dushya.

TUBERCULOSIS

TB is an infectious disease caused by the bacterium *mycobacterium tuberculosis*.

Tuberculosis generally affects the lungs, but can also affect other parts of the body.

Investigations:

Bacteriological test

Sputum cultural test

Radiological: chest X-ray

Nuclei acid amplification

Tuberculin skin test

Cell count (lymphocytes)

Protein (Rivalta tests) – ascites, pleural effusion and meningitis

NATIONAL HEALTH PROGRAMME OF TB

In 1962, national tuberculosis control programme (NTCP) was launched.

The objectives of NTCP are as follows:

1. To deal with the program of tuberculosis through integrated health services.
2. To give priority to the reduction of pool of infection, to case detection, treatment of cases and drug distribution.
3. To give BCG vaccination to susceptible.

In 1992, the Govt. of India, WHO and world bank together reviewed the NTP.

In 1993, Revised National Tuberculosis Control Programme (RNTCP) was introduced.

The salient features of the strategy of RNTCP are →

Achievement of at least 85% cure rate of infectious case through supervised short course chemotherapy involving peripheral health functionaries;

Detecting 70% of the estimated cases - through quality sputum microscopy.

Involvement of NGOs; information, education and communication and improved operational research.

Long term objectives: to reduce tuberculosis in the community to that level when it ceases to be a public health problem.

Short term objectives: to detect maximum number of TB cases and treat them effectively to vaccinate new-born & infants with BCG

Treatment of TB:

Directly observed treatment short course (DOTS) is the name given to the TB control strategy recommend by WHO.

Anti TB drugs:

First line:

- | | | |
|-------------------|---------------------|---------------------|
| 1. Isoniazid (H) | 3. Pyrazinamide (P) | 5. Streptomycin (S) |
| 2. Rifampicin (R) | 4. Ethambutol (E) | |

Newer drugs:

- Ciprofloxacin
- Ofloxacin
- Azithromycin

Ayurvedic management of TB:

Tuberculosis is correlated with Rajyakshama in which 'dhatukshaya' is the main reason to initiate pathogenesis and this may lead to 'ojokshaya.'

The drugs which improve immune power, provide nutritional pool & improve agni are found effective for its management along with ongoing conventional anti-TB drugs.

Kanchanara guggulu & Triphala guggulu are used to treat TB affecting the glands.

Chyavanaprasha avaleha to improve immunity.

Sitopaladi churna, Talishadi churna, Svarna vasant malati, Abharaka bhasma etc. are helpful in the treatment of TB.

AIDS

Human immunodeficiency virus infection and acquired immune deficiency syndrome (HIV / AIDS) is a spectrum of conditions caused by infection with HIV.

AIDS is caused by HIV, a human retrovirus.

Two types – HIV 1 and HIV 2 which are genetically different but has related forms.

Investigation:

Blood donation test:

Enzyme – linked Immunosorbent Assay (ELISA)

Radio Immunoprecipitation Assay (RIP)

Polymerase Chain Reaction (PCR)

Western Blot Confirmatory test

Urine test:

- Urine western blot
- Safe way to screen for HIV
- As sensitive as testing blood

Treatment:

There is currently no cure or effective HIV vaccine.

Treatment consists of highly active anti – retroviral therapy (HAART) which slows progression of the disease.

Treatment also includes preventive and active treatment of opportunistic infections.

Initially treatment is typically a non – nucleoside reverse transcriptase inhibitor (NNRTI).

Ayurvedic management of AIDS:

The first step is to provide a healthy atmosphere to the patient.

Several ayurvedic rasayanas are given to the patient in order to boost his immunity level.

E.g., chyavanaprasha, amalaka rasayana, bhallataka rasayana.

When the patient gains some strength, sodhana techniques are used for eliminating toxins from the body via virechana, vamana & basti. E.g., sneha basti, ksheera basti etc. Brimhana basti.

Diet should consist of preparations made of ghee and soups.

There are several proprietary ayurvedic medicines, which help in improving the condition of patients infected with HIV e.g., Shatavari kalpa.

5. Introduction of general principles of maintenance of health and management of diseases of following systems of Medicine- Yoga, Naturopathy, Unani, Siddha, Physiotherapy and Rehabilitation.

YOGA

युज्यते अनेन इति योगः ।

That which unites atma with paramatma.

योगः चितवृत्ति निरोधः ।

Cessation of mental modifications due to mind, intellect & ego.

Types of yoga:

- | | |
|---------------|---------------|
| 1. Rajayoga | 5. Karmayoga |
| 2. Hathayoga | 6. Jyanayoga |
| 3. Mantrayoga | 7. Bhaktiyoga |
| 4. Layayoga | |

1. Rajayoga:

One endowed with knowledge about nitya & anitya, and gains victory over chittavriti is called Rajayoga.

2. Hathayoga:

With the help of gross body control of chittavritti by the practice of pranayama, asana etc. by a strong person is called as Hathayoga.

3. Gyanayoga:

The person devoid of irshya, dvesha, kama, krodha etc. gets unite with paramatma by gaining knowledge about self is Atmagyana.

4. Karmayoga:

One should always perform his duties without any expectation of fruit, it should not be happening that one does not do any work.

Astanga yoga:

- | | |
|--------------|---------------|
| 1. Yama | 5. Pratyahara |
| 2. Niyama | 6. Dharana |
| 3. Asana | 7. Dhyana |
| 4. Pranayama | 8. Samadhi |

1. Yama (Abstinence):

Self-control

It consists of five principles:

- Ahimsa → nonviolence: not to kill, pain, harm to any living being. E.g., Animal killing for eating.
- Satya → truthfulness: always speak the truth is good and correct and also not harm anyone's feeling when it conveys.

- c. Asteya → non stealing: should never take anything that rightfully belongs to another.
- d. Bhramhacharya → pure way of life.
- e. Aparigraha → non accumulation of possessions.

2. Niyama: (observance)

Discipline

It consists of five principles:

- a. Shaucha – purity

Not only external purity, but more importantly, inner purity

Our clothing, our body as well as our thoughts and feeling should be pure.

- b. Santosha: contentment

Inner wealth provides more happiness than material possessions.

- c. Tapa: self-control, self-discipline.

We should continue on our chosen path with firm determination

- d. Svadhyaya: study of the holy scriptures

Impart valuable knowledge and provide great assistance on the path of yoga.

- e. Ishvara pranidhana: devotion to God

Hand over all that you do to the divine self with pure devotion.

3. Asanas: (postures)

Asanas means which should be done in comfortable posture and gives happiness to body.

Asana in management of sthauilya:

With no side effects, it is also a natural and safe way to approach weight loss and obesity.

Here are some asanas for weight loss

1. Surya namaskara
2. Chaturanga dandasana
3. Virabhadrasana
4. Trikonasana
5. Adho mukha svanasana
6. Sarvangasana
7. Setu bandhasana
8. Parivritta utkatasana
9. Dhanurasana

Shatkarma:

1. Dhauti
2. Basti
3. Neti
4. Nauli
5. Trataka
6. Kapalabhati

Basic principles of yoga:

Yoga is a way of life.

Yoga is a generic term for physical, mental and spiritual disciplines.

Yoga is considered a practical science with five principles forming its core.

1. Proper exercises (Asanas)
2. Proper breathing (pranayama)
3. Proper relaxation
4. Proper diet and nutrition
5. Medication and positive thinking

NISARGOPACHARA

Naturopathy is a system of man building in harmony with constructive principle of nature on physical, mental, moral and spiritual planes of living.

It has great health promotive, disease preventive and curative as well as restorative potentials.

Naturopathy is a drugless system of healing by use of physical methods.

Principles:

All diseases, their causes and treatment are one. Except for traumatic and environmental conditions, the cause of diseases is one i.e., accumulation of morbid matter in the body. The treatment of all diseases is elimination of morbid matter from the body.

Nature is the greater healer. The human body itself has the healing power to prevent itself from disease and regain health if unhealthy.

The suppressed diseases are brought to surface and are removed permanently.

Aim & objectives:

Naturopathy aims at improving the body's inherent healing power to treat the body as a whole, prevent diseases and protect the health by using natural methods such as Hydrotherapy, mud therapy, fasting, diet etc.

UNANI

It is originated from unana or Greece.

It is based on the humoral therapy of Hippocratic school.

Principles of unani are similar to ayurvedic principles.

Principles:

1. Arkan (elements) → the human body contains four elements viz. air, earth, fire, water
2. Mizaj (temperature) → in the unani system, the temperature of the individual is very important as it is considered to be unique. The temperature can be really equitable where the four elements used are in equal quantities.
3. Akhlat (humours) → they are 4: blood, phlegm, black bile, and yellow bile.
4. Quwa (power) → these are three kinds of power.
 - a. Quwa tabiyah or natural power
 - b. Quwa nafsaniyah or psychic power
 - c. Quwa haywaniyah or vital power
5. Ruh (spirit) → ruh is a gaseous substance, obtained from the inspired air, it helps in all the metabolic activities of the body.

SIDDHA

Siddha medicine is a system of traditional medicine originating in ancient Tamilnadu in south India.

Traditionally it is thought that the siddhas laid the foundation for this system of medication. Siddhas were spiritual adepts who possessed the ashta siddhis, or the eight supernatural powers.

Agastya is considered the first siddha and the guru of all siddhas; the siddha system is believed to have been handed over to him by Murugan, son of Shiva and Parvati.

Aims of siddha:

1. Deha siddhi: with the help of parada. Strengthening the body by avoiding jara, roga & mrityu and making it immortal.
2. Lauha siddhi: with the help of metals and chemicals producing superior metals, also called dhatuvaad.

Importance of siddha in treatment:

The drugs used by the siddhas could be classified into three groups viz.

1. Thavaram (herbal product)
2. Thadhu (inorganic substances)
3. Jangamam (animal products)

The treatment in siddha medicine is aimed at keeping the three humours in equilibrium and maintenance of seven elements. So proper diet, medicine and disciplined regimens of life are advised for a healthy living and to restore equilibrium of humours in diseases condition.

Treatment is classified into 3 categories viz.

1. Devamathuvam (divine method)
2. Manuda maruthuvum (rational method)
3. Asura maruthuvam (surgical method)

PHYSIOTHERAPY

Physiotherapy is a system of medicine for complete health care of all age groups in modern age.

Physiotherapy is a treatment measure of physical and electrical means to accelerate the patient's recovery from injuries and diseases that hazards the normal lifestyle.

Physical therapy is used to improve a patient's quality of life through examination, diagnosis, prognosis, physical intervention, and patient education.

Modes of physiotherapy:

Exercise therapy

Massage

Electrotherapy

Electromagnetic therapy

Actinotherapy

Heliotherapy

Infrared therapy

Ultrasonic therapy etc.

Importance of physiotherapy:

Physiotherapy is the most commonly prescribed treatment to assist in the recovery of many injuries and conditions.

Chronic pain, car and sports injuries and challenges with mobility can all be greatly improved with the use of physiotherapy.

Here are just a few reasons why sticking to physiotherapy is so important:

1. Range of motion: physiotherapy patients with range of motion issues will regain their mobility and be able to return to their usual level of activity and better care for themselves.
2. Exercise: able to progress to complete recovery.
3. Neurological disorders: in stroke or Parkinson's disease, physiotherapy plays a key role in aiding with correcting the damage.
4. Cardiopulmonary conditions
5. Pain management:

According to WHO 'physiotherapist assess plan and implement rehabilitative programs that improve or restore human motor functions, maximize movement ability, relieve pain syndromes, and treat or prevent physical challenges associated with injuries, disease and other impairments.

HOMEOPATHY

Homeopathy is generally based on two main principles that a substance that causes symptoms in healthy person can be used in diluted form to treat symptoms and illnesses; a principle known as 'like cures like'.

The more diluted the substance, the more potent it is, which is known as the 'law of infinitesimals.

Importance:

Homeopathy is safe.

Homeopathy is effective and fast acting.

Homeopathic treatments addresses disease at the root level, hence enhancing resistance to disease.

There is no risk of toxicity or side effects.

It stimulates the body's own healing response to disease.

Rehabilitation:

The combines and coordinated use of medi-social, educational, and vocational measures for training the individual to the higher level of functional ability.

It is to support the patient with an injury or disability illness to achieve maximum function.

4 ways to achieve rehabilitation:

1. Medical
2. Social
3. Psychological
4. Vocational

6. Diseases of different Endocrine Glands- such as Thyroid, Parathyroid, Pituitary, Pancreas and Adrenal glands and their management.

THYROID

Hyperthyroidism:

Hyperthyroidism is hyperactivity of the thyroid gland with sustained increase in synthesis and release of thyroid hormones.

Hypothyroidism is a set of disorders that involve excess synthesis and secretion of thyroid hormones by the thyroid gland, which leads to the hypermetabolic condition of thyrotoxicosis.

T3 & T4 ↑

TSH ↓

Hyperthyroidism diseases

1. Grave's disease
2. Goitre
3. Toxic thyroid nodule

1. Grave's disease:

Also known as toxic diffuse goitre is an autoimmune disease that affects the thyroid gland.

Sign & symptoms:

Insomnia

Heat intolerance

Weight loss

Ophthalmopathy

Treatment:

antithyroid drugs which reduces the production of thyroid hormones.

Thyroidectomy is also used in many cases.

2. Goitre

A goitre is a swelling of the neck or the larynx resulting from the enlargement of the thyroid gland.

It may be associated with both hypothyroidism and hyperthyroidism.

Sign & symptoms:

For hyperthyroidism:

Tachycardia

Nervousness

Heat intolerance

For hypothyroidism

Lethargy

Weight gain

Cold intolerance

Causes:

Iodine deficiency

Congenital hypothyroidism

Pituitary diseases

Thyroid cancer

Thyroid hormone insensitivity

Treatment:

It is treated according to the cause, if thyroid gland is producing too much T4 and T3, radioactive iodine is given to the patient to shrink the gland.

3. Toxic thyroid nodule

A toxic thyroid nodule is a cause of hyperthyroidism (an overactive thyroid gland), which is a cause of thyrotoxicosis (having an excess amount of thyroid hormones). This occurs when a single nodule (or lump) grows in the thyroid gland and produces excess thyroid hormones. Toxic nodules are usually benign (i.e. non-cancerous). If the increased hormone production is coming from a single nodule in the gland, this is called a 'toxic nodule.' If the thyroid gland becomes enlarged, for example due to the presence of nodules, this is called a 'goitre.' If there are many nodules causing hyperthyroidism, this is referred to as a 'toxic multinodular goitre'.

Ayurvedic view:

Hyperthyroidism is related with high metabolism and its consequences.

In ayurveda hyperthyroidism has compared with a condition called samanvritta udana.

Samanavritta udana is a condition in which samana vata when aggravated, blocks the udana vata located in the region of thyroid gland. The strong samana vata will surround and envelope the udana vata and disturb its functions due to severity of samana vata, the digestive fire in stomach too will get intense. Then kapha in the stomach will get deteriorated and lead to heated up environment in the stomach. All these events will eventually lead to agitated metabolism.

Ayurvedic management:

In avaranas the stronger and aggravated vata should be treated first. The vata causing obstruction i.e., avaraka is said to be associated with ama.

In samanavrita udana, the samana vata which is causing obstruction of udana and hampering its function should be treated first.

Other strategies of treatment:

Treating excessive accumulation of pitta.

Treating kapha decrease

Treating teekshanagni

Karshya chikitsa

Treatment as per symptoms of the disease.

Treating on lines of galaganda: when goitre is present it should be treated in the lines of galaganda treatment.

Basti chikitsa: Basti with oil or milk / decoction prepared with vata alleviating herbs should be administered in multiple system involvement,

Balya → strengthening medicines and diet

Brimhana → bulk promoting medicines & diet

Rasayana → immunity modulating and rejuvenation therapy

Shirodhara and sarvangadhara with oil medicated with vata and pitta alleviating herbs.

Snigdha virechana → unctuous purgation recipes.

Nasya → nasya drops with oils processed with vata alleviating herbs.

Some useful formulations:

Powder of pippali in vardhamanakrama

After that eranda taila for virechana according to their kosta on next day after the completion of vardhamana pippali regimen.

- | | |
|-----------------------|----------------------------------|
| • Arogyavardhini vati | • Kalyanaka ghrita |
| • Kanchanara guggulu | • Praval panchamrita rasa |
| • Ksheerabala taila | • Ashwagandha churna |
| • Saraswata ghrita | • Gau ghrita nasya (8 – 8 drops) |

Important herbs in treatment of hyperthyroidism:

- | | | |
|---------------|------------|--------------|
| • Ashwagandha | • Chandana | • Yastimadhu |
| • Sariva | • Ushira | • Bala |

Asanas for hyperthyroidism:

Bhujangasana

Setubandhasana

Matsyasana

Shirshasana

Sarvangasana

Surya namaskara

Pranayama → nadi shodhana, bhramari or sheetali pranayama

Hypothyroidism:

Insufficiently synthesis of thyroid hormones.

Causes:

Hashimoto's thyroiditis
Thyroid failure following radio-iodine
Surgical treatment of thyrotoxicosis
Drugs like carbimazole, amiodarone
Iodine deficiency

Symptoms:

Fatigue
Weight gain
Increased sensitivity to cold
Dry skin
Weakness in the muscles, muscle ache, tenderness and stiffness
Slow heart rate
Irregular or heavy menstrual periods
Depression
Impaired memory.

Hypothyroidism diseases

Hashimoto's thyroiditis
Cretinism
Myxoedema
Postpartum thyroiditis
Subacute thyroiditis

Hashimoto's thyroiditis

It is an auto-immune disease in which the thyroid gland is gradually destroyed.

Signs & symptoms:

Fatigue
Pale & puffy face
Dry & thinning of hair

Treatment:

Is treated with thyroid hormone replacement agents.

Cretinism:

Cretinism is a condition of severely stunted physical and mental growth due to untreated congenital deficiency of thyroid hormone, usually due to maternal hypothyroidism.

Myxoedema:

Myxoedema is a term used synonymously with severe hypothyroidism.

Myxoedema develops in the patient with almost total lack of thyroid hormone function. It is generally characterized by bagginess under the eyes and swelling of the face.

Treatment:

Airway management

Thyroid hormone replacement

Glucocorticoid therapy

Supportive measures

Ayurvedic view:

No disease explained in ayurveda can be directly correlated with hypothyroidism. When the pathogenesis and symptoms of hypothyroidism are translated into ayurveda it can be understood on the lines of one or more of the below mentioned conditions:

1. Udanavritta samana
2. Kaphavritta udana
3. Pathological increase of kapha
4. Medoroga
5. Agnimandhya

It is a condition in which the subtype of vata located in chest i.e., udana vata when aggravated will envelope the samana vata, another subtype of vata located in the stomach and intestine and causes deterioration of its functions.

Due to weakening strength of samana vata, the digestive pitta in the stomach will become weak and there is pathological build-up of kapha. All these events will cause weakening of metabolism.

Hypothyroidism starts from

1. The thyroid gland located in the neck region producing low thyroid hormones.
2. The low thyroid hormones causing slowing of metabolism.

Udanavrutta vata starts from

1. Aggravation of udana vata in the chest and neck, the region of thyroid gland followed by,
2. Invasion and enveloping of samana vata in the gut by udana vata with consequential weakening of functions of metabolism.

Therefore, this comparison of hypothyroidism with udanavrita samana seems logical.

Ayurvedic management:

In avaranas the aggravated vata subtype which is enveloping, the other vata subtype should be addressed first. The vata causing obstruction is said to be associated with ama.

In udanavritta samana, udana vata is causing obstruction of samana vata. Therefore, udana vata is associated with ama. Therefore, the ama should be dealt with first and then vata is addressed.

Ama pachana treatment:

Fasting, sudation, medicines, gruels and 'light to digest' foods prepared with ama digesting herbs.

Treatment for strengthen weak samana vata includes administration of medicines to kindle the digestive fire, emesis, light diet & rasayana sevana

Other strategies of treatment:

Treatment as per symptoms of disease

Treatment in accordance to related tissues and channels.

Treating on lines of galaganda.

Treating on lines of medoroga.

Basti chikitsa: basti with oil or milk / decoction prepared with vata alleviating herbs should be administered.

Udvartana: herbal powder massage will enable to remove obstruction in the channels to remove obstruction in the channels, to kindle digestive and tissue fire, to remove excessive fat which has accumulated in the body and destroy morbid kapha.

Some useful formulations:

Powder of pippali in vardhamana krama

After that eranda taila for virechana according to their kosta on next day after the completion of vardhamana pippali regimen.

Arogyavardhini vati

Kanchanara guggulu

Medohara vidangadi lauha

Varunadi Kashaya

Gaumutra haritaki

Chitrakadi vati

Important herbs in treatment of hypothyroidism

- | | | |
|---------------|----------|-------------|
| • Kanchanara | • Shigru | • Guggulu |
| • Ashwagandha | • Varuna | • Aragwadha |

PARATHYROID

Hyperparathyroidism

Hyperparathyroidism is when parathyroid glands create high amounts of parathyroid hormone in bloodstream.

Clinical features:

Bone cysts

Renal stones

Muscle weakness

Complication:

Deterioration of renal function

Metabolic disturbance e.g., hypomagnesia, pancreatitis, gout or pseudo gout.

Hypertension

Peptic ulcer disease

Treatment:

A basic method of treatment of primary hyperparathyroidism is surgical.

For the fastest restoration of bone structure after operation are recommended –

- The diet fortified with calcium
- Calcium medications
- Vitamin D3
- Physiotherapy exercises
- Calcitonin

Hypoparathyroidism:

Hypoparathyroidism is an uncommon condition in which the body produces abnormally low level of parathyroid hormone (PTH)

Clinical features:

Tetany

Hypotension

Defective dental root formation

Refractory heart failure with cardiomegaly

Treatment:

Oral calcium

Vitamin D

Parathyroid hormone replacement

Complications:

Heart problems

Mental health issues

Hardening and changes in shape of bone

Poor growth

Balance problem

Clouded vision

7. General introduction, types and Management of diseases caused by Vyadhi Kshamatva Hinata (Immuno deficiency disorders), Auto Immune Disorders.

VYADHIKSHAMTVA

The term vyadhi kshamatva is formed by two words vyadhi + kshamatva

Vyadhi → disease

Kshamatva → resistance

It is capacity of the body to resist the body.

The human body has the ability to resist almost all types of organism or toxins that tend to damage the organs, this capacity is called immunity.

Types:

Regarding the three kinds of strength, they are natural, periodic & acquired

1. Sahaja bala: inherited strength of body and mind is called sahaja bala
2. Kalaja bala: kalaja bala is the one which is dependent on the variation in season & age.
3. Yuktikruta bala: yuktikruta bala is, accruing from diet and exercise.

Vyadhi kshamatva reducing factors:

Acute vitiation of doshas leads to formation of strong diseases.

Infections, body contamination

Dehydration leads to imbalance in fluids, minerals and salts. Body starts to behave in unexpected ways.

Depletion by chronic diseases.

Excessive exercise leads to excess loss of body tissue and weakness. Hence low immunity.

Excess intake of alcohol – damages liver, vascular and mental system

Keeping awake at night – increases vata dosha rapidly, increases vata means decreases quality of body tissues, and depleted immunity.

Mental stress, fear, anger, envy etc.

Ways to increase vyadhi kshamatva:

Birth in country where people are naturally strong.

Being born at time when people naturally gain strength.

Favourable time and season

Nutritious food

Excellence of the qualities of sperm and ovum of parents.

Excellent physical strength

Excellence of mind

Favourable disposition of race & species.

Regular exercises

Optimistic, cheerful, positive disposition.

Immunity improving measures:

1. Maintaining tripods of life → ahara, nidra, brahmacharya
2. Following sadvritta, rutucharya, din acharya
3. Use of rejuvenating therapy rasayana & vajeekarana, timely internal purificatory procedures.
4. Maintaining proper digestive power.
5. Rasayana: it improves immunity by resisting disease both mentally and physically.

Immunity boosting herbs:

- | | | |
|---------------|---------------|-------------------|
| • Guduchi | • Shatavari | • Swarna bhasma |
| • Amalaka | • Pippali | • Rajata bhasma |
| • Yastimadhu | • Brahmi | • Swarna makshika |
| • Jyotishmati | • Ashwagandha | • Haritaki |

Ayurvedic medicines:

- | | |
|-----------------------|--------------------|
| • Chyavana prash | • Triphala guggulu |
| • Brahma rasayana | • Loha bhasma |
| • Arogyavardhini vati | |

AUTO IMMUNE DISEASE

Autoimmune diseases are caused by an overactive immune system. It is a disease in which body's immune system attacks its own tissue mistakenly.

Causes:

Sequestered or hidden antigens

Neo antigens

Cessation of tolerance

Cross reacting antigens

Loss of immunoregulation

Classification:

Broadly classified into 3 groups:

1. Haemolytic autoimmune diseases: clinical disorders due to destruction of blood components, auto antibodies are formed against one's own RBCs, platelets, leucocytes e.g., haemolytic anaemia, leukopenia, thrombocytopenia
2. Localised autoimmune diseases: a particular organ is affected due to auto antibodies. E.g., thyroiditis (attacks the thyroid), multiple sclerosis (attacks myelin coating of nerve axons), myasthenia gravis (attacks nerve muscle junctions), juvenile diabetes (attacks insulin producing cells)
3. Systemic autoimmune diseases: immune complexes accumulate in tissues and cause inflammation and damage. Affects many organs or whole body. E.g., systemic lupus erythematosus (SLE) (Anti-nuclear antibody) harms kidney, heart, brain, lungs, skin. Rheumatoid arthritis (anti IgG antibodies) affects joints, heart, lungs, nervous system.

Rheumatoid fever (cross reaction between antibodies to streptococcus and auto-antibodies.

Treatment:

Treatment depends on the type of severity of condition.

NSAIDs and immunosuppressants are often used.

Some autoimmune diseases are treated with medications that alleviate specific symptoms.

Haemolytic anaemia: treated with Vit. B12.

Thyrotoxicosis: treated with antithyroid drugs

Myasthenia gravis: treated with choline esterase inhibitors

Rheumatoid arthritis: anti-inflammatory drugs

Lupus erythematosus: treated with immune suppressive or antimitotic drugs such as corticosteroids, cyclophosphamide, azathioprine.

8. Description and Management of following Emergency Conditions- Acute Haemorrhage, Hypertensive Emergencies, Acute abdominal pain (Renal colic, Biliary colic, Gastritis, Pancreatitis, Peritonitis and Appendicitis), Acute Abdomen, Anuria/ Oliguria, Congestive Heart Failure, Myocardial Infarction/Angina, Shock, Syncope, Convulsions, Hyperpyrexia, Hyperglycaemia, Hypoglycaemia, Status Asthmaticus, Acute Respiratory distress Syndrome, Drowning and Electric shock.

Management of emergency conditions:

ACUTE HAEMORRHAGE

Haemorrhage of bleeding is an escape of blood from ruptured blood vessels.

Haemorrhage can refer to blood loss inside the body, called internal bleeding or it can refer to blood loss outside of the body, called external bleeding.

Emergency management:

Mechanical method:

Pressure

Haemostat

Sutures and ligation

Chemical methods:

Local agents: adrenaline

Thrombin

Surgical

Surgical fibrillar

Gelatine sponge

Oxycel

Microfibrillar collagen

Fibrine glue

Systemic agents: platelet rich plasma

Blood administration

Fresh frozen plasma

Thermal agents: cautery

Electrocautery

Cryosurgery

Lasers

HYPERTENSIVE EMERGENCIES

Hypertensive crisis is an umbrella term for hypertensive urgency and hypertensive emergency.

Hypertensive urgency occurs when blood pressure spikes – blood pressure readings are 180/110mmHg or higher, but there is no damage to body's organs.

Hypertensive emergency means blood pressure is so high that organ damage can occur. This is managed in ICU of hospitals.

Emergency management:

Patients with a hypertensive emergency need admission with continuous blood pressure monitoring.

Assess for target organ injury and start parenteral medications as needed.

IV sodium nitroprusside injection.

It is also important that the blood pressure is lowered smoothly and not too abruptly. The initial goal in hypertensive emergencies is to reduce the pressure by no more than 25% (within minutes to 1 or 2 hours). And then towards a level of 160/100 mmHg within a total of 2 – 6 hours. Excessive reduction in blood pressure can precipitate coronary, cerebral, or renal ischemia and possibly infarction.

ACUTE ABDOMINAL PAIN

An acute abdomen refers to a sudden severe abdominal pain.

Several causes need surgical treatment.

Causes:

- Acute appendicitis
- Acute peptic ulcer
- Acute gastritis
- Acute pancreatitis
- Ureteric colic
- Renal colic
- Ruptured spleen

Emergency treatment:

Hospitalization

IV or IM analgesics or sedatives to relieve pain

Antispasmodics like dicyclomine with paracetamol or mefenamic acid.

Antibiotics to treat infections

IV fluids & electrolytes

Find and treat the underlying cause

Surgery (if needed)

Lithotomy or lithotripsy in case of calculus.

Appendectomy in case of appendicitis

Cholecystectomy in case of cholecystitis or gall stone.

Herniectomy or herniorrhaphy in case of hernia.

Colectomy in case of diverticulitis etc.

RENAL COLIC PAIN

Renal colic pain is type of pain patient gets when urinary stones block parts of his urinary tract.

Intense pain along the side of body between ribs and hip, or in lower abdomen.

Renal colic happens when a stone gets lodged in urinary tract, often in ureter. The stone stretches and widens the area causing intense pain.

Emergency management:

Bed rest and hot water bag over the affected area.

Give diclofenac 75mg intramuscularly unless it is contraindicated.

A second 75mg dose may be given, after 30 minutes if necessary.

Atropine → 0.6 - 1.2 mg IM

Metoclopramide → 10 mg IM

Increased water intake

Surgery indicated if –

1. Stone is too large to pass spontaneously (>7mm)
2. Causing obstruction & impairing renal function.
3. Proximal infection combined with obstruction one of these procedures to remove large stone and relieve renal colic.

Extracorporeal shock wave lithotripsy (ESWL)

Ureteroscopy

Percutaneous nephrolithotomy

BILIARY COLIC

Biliary colic is defined as pain in the abdomen, due to obstruction usually by stones in the cystic duct or common bile duct of the biliary tree. It typically occurs after eating a large, fatty meal that causes contraction of the gallbladder. Treatment of this disease is primarily surgical, involving removal of the gallbladder, typically using a laparoscopic technique. This activity describes the risk factors, evaluation, and management of biliary colic and stresses the importance of the interprofessional team in caring for affected patients.

GASTRITIS

Gastritis is a general term for a group of conditions with one thing in common: Inflammation of the lining of the stomach. The inflammation of gastritis is most often the result of infection with the same bacterium that causes most stomach ulcers or the regular use of certain pain relievers. Drinking too much alcohol also can contribute to gastritis.

Gastritis may occur suddenly (acute gastritis) or appear slowly over time (chronic gastritis).

In some cases, gastritis can lead to ulcers and an increased risk of stomach cancer. For most people, however, gastritis is not serious and improves quickly with treatment.

PANCREATITIS

Pancreatitis is inflammation of the pancreas. The pancreas is a long, flat gland that sits tucked behind the stomach in the upper abdomen. The pancreas produces enzymes that help digestion and hormones that help regulate the way your body processes sugar (glucose). Pancreatitis can occur as acute pancreatitis — meaning it appears suddenly and lasts for days. Some people develop chronic pancreatitis, which is pancreatitis that occurs over many years. Mild cases of pancreatitis improve with treatment, but severe cases can cause life-threatening complications.

PERITONITIS

Peritonitis is a serious condition that starts in the abdomen. That's the area of the body between the chest and the pelvis. Peritonitis happens when the thin layer of tissue inside the abdomen becomes inflamed. The tissue layer is called the peritoneum. Peritonitis usually happens due to an infection from bacteria or fungi.

There are two types of peritonitis:

- Spontaneous bacterial peritonitis. This infection is caused by bacteria. It can happen when someone has liver disease, such as cirrhosis, or kidney disease.
- Secondary peritonitis. Peritonitis can happen due to a hole, also called a rupture, inside an organ in the abdomen. Or it can be caused by other health conditions.

It's important to get treatment fast for peritonitis. Health care providers have ways to clear out the infection. They also can treat any medical problem that might be causing it. Peritonitis treatment usually involves medicines that are used for infections caused by bacteria, called antibiotics. Some people with peritonitis need surgery. If you don't get treatment, peritonitis can lead to a serious infection that spreads through the body. It can be deadly.

A common cause of peritonitis is a treatment for kidney failure called peritoneal dialysis. This treatment helps get rid of waste products from the blood when the kidneys struggle to do that job themselves. If you get peritoneal dialysis, you can help prevent peritonitis with good hygiene before, during and after dialysis. For example, it's important to wash your hands and clean the skin around your catheter.

APPENDICITIS

Appendicitis is an inflammation of the appendix, a finger-shaped pouch that projects from your colon on the lower right side of your abdomen.

Appendicitis causes pain in your lower right abdomen. However, in most people, pain begins around the navel and then moves. As inflammation worsens, appendicitis pain typically increases and eventually becomes severe.

Although anyone can develop appendicitis, most often it occurs in people between the ages of 10 and 30. Standard treatment is surgical removal of the appendix.

ACUTE ABDOMEN

An acute abdomen is a condition that demands urgent attention and treatment. The acute abdomen may be caused by an infection, inflammation, vascular occlusion, or obstruction. The patient will usually present with sudden onset of abdominal pain with associated nausea or vomiting. This activity reviews the evaluation and treatment of patients presenting with an acute abdomen, and highlights the role of the interprofessional team in caring for these patients.

ANURIA / OLIGURIA

Oliguria is the low output of urine.

In humans, it is clinically classified as an output less than 400 ml/day (but more than 80 ml/day). The decreased output of urine may be a sign of dehydration, kidney failure, hypovolemic shock, multiple organ dysfunction syndrome, urinary obstruction / urinary retention, DKA, preeclampsia, and urinary tract infections etc.

Beyond oliguria is anuria, which represents an absence of urine, clinically classified as below 80 ml/day.

Diagnosis →

Ultrasound examination of the kidney to rule out obstructive processes.

The mechanisms causing oliguria can be categorized globally in three different categories:

- Prerenal: in response to hypoperfusion of the kidney (e.g., as a result of dehydration by poor oral intake, cardiogenic shock, diarrhoea, G6PD deficiency, massive bleeding or sepsis)
- Renal: due to kidney damage (severe hypoperfusion, rhabdomyolysis, medication)
- Postrenal: as a consequence of obstruction of the urine flow (e.g., enlarged prostate, tumour compression urinary outflow, expanding hematoma or fluid collection)

Treatment →

IV Furosemide – Catheterization – Surgical intervention (if needed) –

Treat the cause like urinary obstruction, renal insufficiency etc.

CONGESTIVE HEART FAILURE

CHF is when the heart is unable to pump sufficiently to maintain blood flow to meet the body's needs.

Types of CHF →

1. Left-sided CHF is the most common type of CHF. It occurs when the left ventricle doesn't properly pump blood. As the condition progresses, fluid can build up in the lungs, which makes breathing difficult. There are two kinds of left-sided heart failure:
 - a. Systolic heart failure occurs when the left ventricle fails to contract normally. This reduces the level of force available to push blood into circulation. Without this force, the heart can't pump properly.
 - b. Diastolic failure, or diastolic dysfunction, happens when the muscle in the left ventricle becomes stiff. Because it can no longer relax, the heart can't quite fill with blood between beats.
2. Right-sided CHF occurs when the right ventricle has difficulty pumping blood to the lungs. Blood backs up in the blood vessels, which causes fluid retention in lower extremities, abdomen, and other vital organs.

It is possible to have left-sided and right-sided CHF at the same time. Usually, the disease starts in the left side and then travels to the right when left untreated.

Causes →

- Coronary artery disease
- Heart attack (occurs when a coronary artery becomes suddenly blocked, stopping the flow of blood to the heart muscle)
- Cardiomyopathy – Valve disease – Hypertension – kidney disease – congenital heart disease – Diabetes etc.

Symptoms →

Acute attack includes rapid or irregular heartbeat (arrhythmias) associated with shortness of breath (dyspnoea), chest pain or tightness, weakness or fainting.

Chronic symptoms include dyspnoea at rest, chest tightness, fatigue, weakness, edema in legs, ankles & feet etc.

Treatment →

- Resuscitation.
- Treat high blood pressure.
- Treat lipid disorders.
- Discontinue alcohol or illegal drug use.
- An ACE inhibitor or an angiotensin II receptor blocker is prescribed if patient has coronary artery disease, diabetes, high blood pressure, or other vascular or cardiac conditions. Beta blockers may be prescribed if patient has high blood pressure or a previous heart attack.
- Surgical intervention (if needed) →
 - Angioplasty
 - Open heart surgery (Valve repair)
 - Heart bypass surgery (Coronary Artery Bypass Grafting)

MYOCARDIAL INFARCTION

Myocardial infarction (MI) is a clinical syndrome that results from occlusion of a coronary artery, with resultant death of cardiac myocytes in the region supplied by that artery.

Emergency management:

Preserve cardiac muscle fibres

Vital signs

IV assess

ECG

Bio markers

Initial management:

M → Morphine

O → Oxygen

N → Nitrates

A → Antiplatelets

Pharmacological management:

Analgesics

Morphine sulphate

Decreases preload and afterload, reduce anxiety

Nitrates

IV nitroglycerin

ACE inhibitors → increases the left ventricular function
Prevent ventricular remodelling

Beta-adrenergic blockers → decreases the contractility and myocardial oxygen demand

Cholesterol lowering agents

Stool softeners

Surgical management:

Coronary artery bypass graft (CABG): construction of new conduits between aorta or other major arteries with help of CPB machine.

Indications: triple vessel disease
Fails medical management

Graft used: internal mammary artery
Great saphenous vein
Inferior epigastric vein
Radial artery

SHOCK

Circulatory shock, simply known as shock, is a serious, life-threatening medical condition defined as an inadequate perfusion of tissues which is insufficient to meet cellular metabolic needs.

As the blood carries oxygen and nutrients around the body, reduced flow hinders the delivery of these components to the tissues, and can stop the tissues from functioning properly.

Types:

1. Hypovolemic shock
2. Cardiogenic shock
3. Obstructive shock
4. Septic shock
5. Neurogenic shock

Treatments:

Shock requires immediate interventions to preserve life.

Therefore, the early recognition and treatment is essential even before a specific diagnosis is made.

Most forms of shock seen in trauma or sepsis respond initially to aggressive intravenous fluids e.g., 1 litre normal saline bolus over 10 minutes or 20ml/kg in a child).

In case of respiratory insufficiency (i.e., diminished levels of consciousness, hyperventilation due to acid-base disturbances or pneumonia) tracheal intubation and mechanical ventilation may be necessary

ABCDE in shock management:

Airway

Breathing

Circulation

Disability

Exposure

Drugs like –

Sedatives

Chronotropic drugs

Inotropic drugs

Vasoconstrictor

Beta blockers

Diuretics

Anti-biotics for septic shock

Anti-histaminic & corticosteroids for anaphylactic shock.

SYNCOPE

Syncope is the medical term for fainting, a sudden usually temporary, loss of consciousness generally caused by insufficient oxygen in the brain either through cerebral hypoxia or through hypotension.

Treatment:

Intravenous access

Oxygen administration

Advanced airway technique

Glucose administration

Pharmacologic circulatory support

CONVULSION

A convulsion is a medical where body muscles contract and relax rapidly and repeatedly, resulting in an uncontrolled shaking of the body.

The term convulsion is sometimes used as a synonym of seizure.

Management:

The first aid for a seizure depends on the type of seizure occurring.

Loosen tight clothing surrounding the head or neck.

Clear away dangerous objects if person is moving.

Anti-epileptic drugs – acetazolamide, diazepam

HYPERPYREXIA

Hyperpyrexia is an extreme elevation of body temperature which, depending upon the source, is classified as a core body temperature greater than or equal to 40.0 or 41.5 °C (104.0 or 106.7 °F).

Causes →

Intracranial haemorrhage – Viral or bacterial infections – Sepsis –
Kawasaki syndrome – Thyroid storm etc.

Management →

- A cool bath or cold, wet sponges put on the skin.
- Liquid hydration through IV Fluids or from drinking.
- Fever-reducing medications, such as dantrolene.

HYPERGLYCAEMIA

Hyperglycaemia means high blood sugar or glucose.

Insulin is a hormone that moves glucose into cells to give them energy.

Hyperglycaemia happens when body doesn't make enough insulin or can't use it the right way.

Blood glucose levels can vary from day to day.

Management:

Regular exercise is often an effective way to control blood sugar. Don't exercise if ketones are present in urine. This can drive blood sugar even higher.

Check blood sugar: monitor blood glucose as directed by doctor.

Recommend dietary changes

Emergency treatment for severe hyperglycaemia

Fluid replacement:

Receive fluids: either orally or through IV until patient is rehydrated. The fluid replaces those patients has lost through excessive urination, as well as help dilute the excess sugar in blood.

Insulin therapy

Insulin reverses the processes that cause ketones to build up in blood. Along with fluids to build up in blood, along with fluids & electrolytes. Patient will receive insulin therapy usually through vein.

HYPOGLYCAEMIA

Hypoglycaemia is the medical term for a state produced by a lower-than-normal level of blood glucose.

Inadequate supply of glucose to the brain, resulting in impairment of function.

Treatment:

Hypoglycaemia is treated by restoring the blood glucose level to normal by the ingestion or administration of dextrose or carbohydrate foods.

In some circumstances it is treated by injection or infusion of glucagon.

Medication like diazoxide, octreotide or glucocorticoids, or by surgical removal of much of the pancreas.

In hospital personnel can establish an IV and give intravenous dextrose, concentrations varying depending on age –

- Infants → dextrose 10%
- Children → dextrose 25%
- Adults → dextrose 50%

Care must be taken in giving these solutions because they can be very necrotic if the IV is infiltrated.

If an IV cannot be established, the patient can give 1 to 2 mg of glucagon in an IM injection.

Difference between hyperglycaemia & Hypoglycaemia

Hyperglycaemia	Hypoglycaemia
Refers to an excess of glucose in the bloodstream.	Refers to a deficiency of glucose in the blood stream.
Blood sugar level rises more than 130 mg/dl	Blood sugar level drops less than 70mg/dl
Can be caused by non-compliance of anti-glycaemic agents	Can be caused by excessive intake of anti-glycaemic agents beyond the prescribed dose.
Commonest complication is hyperosmolar, hyperglycaemic non-ketotic syndrome.	Commonest complication is diabetic ketoacidosis

STATUS ASTHMATICUS

Acute severe asthma is an acute exacerbation of asthma that does not respond to standard treatments of bronchodilators (inhalers) and corticosteroids.

Symptoms include chest tightness, rapidly progressive dyspnoea (shortness of breath), dry cough, laboured breathing, and extreme wheezing. On examination, the respiratory rate may be elevated (more than 25 breaths per minute), and the heart rate may be rapid (110 beats per minute or faster). Reduced oxygen saturation levels (but above 92%) are often encountered.

Management →

- Positive-pressure therapy, including mechanical ventilation.
- Intravenous (IV) medications (e.g., magnesium sulphate), aerosolized medications to dilate the airways (bronchodilation) (e.g., albuterol or ipratropium bromide / salbutamol)
- Intravenous corticosteroids and methylxanthines are often given.

ACUTE RESPIRATORY DISTRESS SYNDROME (ARDS):

ARDS is a severe lung disease caused by a variety of direct and indirect issues.

It is characterized by inflammation of the lung parenchyma leading to impaired gas exchange with systemic release of inflammatory mediators causing inflammation, hypoxemia and frequently resulting in multiple organ failure.

Management:

Ventilator support

Prone positioning

Sedatives

Fluid management

Extracorporeal membrane oxygenation (ECMO)

Hypoglycaemic coma & Hyperglycaemic coma:

Hypoglycaemic coma:

History:

If patient has missed his meals or undergone severe exertion, if he had sweating & hunger, and if he has become unconscious suddenly then he is in hypoglycaemic coma.

Clinical features:

If the patient is breathing quietly, pulse is slow & bounding, then he is in hyperglycaemic coma.

Blood sugar strips:

If available, will make the diagnosis clear.

By glucometer.

Hyperglycaemic coma:

History:

If patient had not taken his regular tablets or insulin, if he had fever or any illness and if he has lost consciousness gradually, then he is in hyperglycaemic coma.

Clinical picture:

If patient is febrile, looks toxic pulse is feeble & fast and breathing is rapid, deep with sweet odour, then he is in hyperglycaemic coma.

Blood sugar strips:

If available, will make the diagnosis clear.

By glucometer.

If glucometer is not available inj. 25% glucose 25ml × 4 amps IV

If patient starts waking up 25% glucose → 10% dextrose → observe. If not fully alert give IV mannitol	If patient does not wake up → refer to physician. Managed in hospital.
--	---

In hypoglycaemia

Administration of dextrose (age wise different dose) or carbohydrate food.

Injection of glucagon → 1 – 2 mg

Medication like diazoxide, glucocorticoid

In some conditions surgical removal of pancreas

In hyperglycaemia →

Fluid replacement

Receive fluid until patient is rehydrated

Insulin therapy.

DROWNING

Drowning is defined as respiratory impairment from being in or under a liquid (submersion). Near-drowning is a term typically used to describe almost dying from suffocating under water; it is the last stage before fatal drowning.

Management →

- Cardiopulmonary resuscitation (CPR)
- The airway-breathing-circulation (ABC) sequence should be followed, rather than starting with compressions as is typical in cardiac arrest, as the basic problem is lack of oxygen.
- If the person has near-drowned in cold water, remove their wet clothes and cover them in warm blankets or clothing to prevent hypothermia.
- Hypotension remaining after oxygenation may be treated by rapid crystalloid infusion.

ELECTRIC SHOCK

Electrical injury is a physiological reaction caused by electric current passing through the (human) body. Electric shock occurs upon contact of a body part with any source of electricity that causes a sufficient magnitude of current to pass through the victim's flesh, viscera or hair.

Management →

- Begin CPR if the person shows no signs of circulation, such as breathing, coughing or movement.
- Treatment of electric shock depends on the severity of the burns or the nature of other injuries found.
- Topical antibiotic ointments and dressings are applied for minor burns. For severe burns, surgery with skin grafting may be required. Sometimes amputation may also be needed.
- As with conventional thermal injury, electrical injuries cause massive fluid shifts with extensive tissue damage and acidosis; therefore, monitoring a patient's hemodynamic is important. A Foley catheter is helpful in monitoring urine output and, therefore, tissue perfusion.
- IV Fluids & electrolytes to maintain fluid & electrolyte balance
- Antibiotics to avoid sepsis.
- Analgesics and anti-inflammatory drugs for symptomatic relief.



THANK YOU