Clinical Study

A Clinical Study on The Role of Shirishadyavaleha and Virechana In The Management of Tamakashvasa

*Dr. Pavankumar N.Mali, **Dr.Vaishali P. Mali, ***Dr.Baldev Kumar ****Prof. M.S. Baghel

Abstract :

This paper reports details of a clinical study conducted on patients of *Tamakshvasa*. Present study was planned with following *Aims & Objectives*. To study aetiopathogenesis & principles of Management of the disease Tamaka Shvasa in Ayurvedic classics & modern medical literature, *To assess the role of Shirishadyavaleha in Tamaka Shvasa&To assess the role of Virechana Karma in modifying the drug effect in Tamaka Shvasa*. The drug under clinical trial was *Shirishadyavaleha*. shirisha, Vasa, Bharangi, Kantakari, Pippali, Haritaki in equal parts, Arka Pushpa & Trijata was used as Prakshepa dravya(1/ 20th part). In one group patients were given Shirishyadyavaleh only and in another group patients were subjected to Virechan karma followed by drug Shirishyadyavaleha .Clinical study carried out under designed protocol and results of study were assessed in terms of effect on Roga bala, Chetas bala ,Deha bala and Agni bala.Overall effect of therepy shows that Virechana with Shirishadyavaleha have more creditability in bringing out stable & maximum improvement in Tamaka Shvasa.

सारांश:

इस अध्ययन का मुख्य उद्देश्य आयुर्वेद तथा अर्वाचीन शास्त्र में वर्णित तमक श्वास व्याधि के निदान और चिकित्सा सूत्र का विस्तृत अध्ययन करता, शिरिशाद्यवलेह और विरेचन कर्म का तमक श्वास के रूग्णों में परीक्षण करना है। इस अध्ययन में रोगियों को दो श्रेणियों में विभाजित किया – प्रथम श्रेणी में शिरिशाद्यावलेह और द्वितीय श्रेणी में विरेचन कर्म के बाद शिरिशाद्यावलेह का प्रयोग किया गया। शिरीष, वासा, भारंगी, कण्टकारी, पिप्पली, हरीतकी समभाग में और त्रिजात, अर्क पुष्प का प्रयोग प्रक्षेप रूप में करके शिरिशाद्यवलेह का निर्माण किया गया। उपचार का मूल्याङ्कन रोग बल, अग्नि बल, देह बल, चेतस बल में होने वाले बदलाव के अनुरूप किया। प्रस्तुत अध्ययन से यह सिद्ध होता है कि विरेन कर्म के उपरान्त शिरिशाद्यावलेह का प्रयोग तमक श्वास में अधिक लाभदायक है।

Clinical Study

A Clinical Study on The Role of Shirishadyavaleha and Virechana In The Management of Tamakashvasa

Dr. Pavankumar N.Mali, Dr.Vaishali P. Mali, Dr.Baldev Kumar, Prof. M.S. Baghel

Tamaka Shvasa is mentioned as one of the variety among five types of Shvasa. Tamaka Shvasa is a 'Swatantra' Vyadhi, having its own etiology, pathology & Management. It is mentioned as Yaapya Vyadhi. Bronchial asthma mentioned in Modern Medicine closely resembles with Tamaka Shvasa.

Bronchial Asthma is a major chronic airway disorder, it is a serious public health problem in countries through out the world. Asthma affects peoples of all age & can be severe, sometimes fatal. Over 100 million people worldwide are suffering from Asthma, the prevalence is increasing among children.

As with all chronic diseases rising prevalence is only part of the concern. Mortality due to asthma rose in last decade & has not changed in recent years. Morbidity due to exacerbations & persistent symptoms present as a huge burden to individuals & their community; for e.g. in the United states, over 10 million school days were lost in one year by children with asthma. The consequent lost productivity of their parents was almost \$1 billion. Unlike many chronic diseases asthma often appears very early in childhood. The life long consequences of inadequately treated asthma can be substantial. A major burden of asthma falls on the developing world especially in terms of disability adjusted life years. The extent of Burden of asthma is related to its severity. Although patients with severe asthma are fewer in number than those with milder asthma, patients with inadequately controlled severe asthma have high expenditure in health care cost especially in terms of hospitalization.

Asthma may be defined based on pathology & its functional consequences as- Asthma is a chronic inflammatory disorder of the airways in which many cells plays a role in particular mast cells, eosinophils & T-lymphocytes. In susceptible individuals this inflammation causes recurrent

episodes of wheezing, breathlessness, Chest tightness & Cough particularly at night or in the early morning. These symptoms are usually associated with wide spread but variable air flow limitation that is at least partly reversible either spontaneously or with treatment. The inflammation also causes associated increase airway responsiveness to a variety of stimuli.

Present study was planned with following Aims & Objectives:

- (1)To study aetiopathogenesis & principles of Management of the disease Tamaka Shvasa in Ayurvedic classics & modern medical literature.
- (2) To assess the role of Shirishadyavaleha in Tamaka Shyasa.
- (3) To assess the role of Virechana Karma in modifying the drug effect in Tamaka Shvasa

PLAN OF STUDY:

Patients were selected on the basis of presence of classical symptoms of Tamaka Shvasa. Patients were then subjected to the detailed clinical history & physical examination on the basis of specially prepared research proforma. Total 34 patients were registered for this study.

All the patients were randomly divided into two groups:

VIRECHANA - AVALEHA GROUP (V.A.):

In this group, 12 patients were given Shirishadyavaleha in dose of 10 gm bid for duration of 1 months after performing Virechana Karma. Out of these 10 have completed the course.

AVALEHA GROUP (A):

In this group, 22 patients were given Shirishadyavaleha in dose of 10 gm bid for 1 month. Out of these 13 have completed the course.

The tone of this study is both conceptual & clinical. Clinical study includes observations & results obtained in present study followed by Discussion, Summery & conclusion which was observed in present study. In this article details regarding clinical study is elaborated.

CLINICAL CONTRIVE

To assess the efficacy of remedy Shrishadyavaleha, scientific clinical study has been designed. This clinical trial is a carefully and ethically designed experiment with an aim to answer precisely framed questions. It is a mean to evaluate the efficacy and/or tolerability of a treatment in Human beings. Details of clinical study are as follows:

AIMS AND OBJECTIVES:

This clinical trial has been designed to:

- 1) Study the Etiopathogenesis of disease Tamaka Shvasa.
- To evaluate the efficacy of Shirishadyavaleha in Tamaka Shvasa with and without Virechana Karma.

CONSTITUENTS OF DRUG:

The drug under clinical trial was **Shirishadyavaleha. s**hirisha, Vasa, Bharangi, Kantakari, Pippali, Haritaki in equal parts, Arka Pushpa & Trijata was used as Prakshepa dravya (1/20th part). Avaleha preparation in the form of Gudavaleha was prepared with Purana Guda.

CRITERIA OF ASSESSMENT:

Improvement in Rogabala along with Deha, Agni & Chetasa bala was considered for assessment. In this study an effort has been made to follow the guidelines laid down by Aacharya Charaka for assessment of Results. Total 100 score has been divided in following- Rogabala, Dehabala, Agnibala and Chetasabala as -

ROGA BALA (60)

Roga bala has been given 60 score out of 100 for the degree of disease activity and symptoms. This score has been further subdivided as following.

Shvasa Kashtata - 25

Dyspnoea - 5, Duration - 4, Intensity - 4, Presence

of Pranavaha Sroto Dusti Lakshana - 4, Frequency-4, Asino Labhate Saukhyam - 4

Kaasa - 10

Kaasa - 4, Kaasatah Sanniruddhyate - 2, Kaphanishtivanama - 2, Shleshma Vimokshante Saukhyama - 2

Associated Symptoms - 10

Peenasa - 2, Parshvashula - 2, Kanthodhvansana - 2, Ushnabhinandati - 2

Trita / Vishushkasyata - 2, Wheeze - 5, A.E.C. - 5, PEFR-5

AGNIBALA - 20 It has been further divided into (6 + 6 + 4 + 4) as follows

Jaranashakti - 6, Abhyavaharanashakti - 6,

Ruchi Hi Aaaharakale - 4, Vata Mutra Purisha Retasam Mukti - 4

DEHABALA (10) - It has been further divided into (4 + 4 + 2) as follows:

Balavriddhi - 4, Swara Varna Yoga - 4, Sharira Upachaya - 2,

SATVABALA (10) It has been further divided as

Nidra Labhoyathakalam-4, Sukhena Cha Pratibodhanam-2, Vaikarikanam Cha Swapnanam Adarshanam-2, Mano Buddhi Indriya Avyappatti-2

EFFECT OF THERAPY:

For the assessment of results, an effort has been made to use the classical tools of assessment as described by Charaka. (Cha. Vi. 8-89). As per classical references, for the assessment of results, four criteria's i.e. Roga Bala, Deha Bala, Agni Bala & Chetasa Bala were adopted. For Statistical analysis, to make these criteria more objective an effort has been made to give scores to all subjective Criteria.

Vol.III No.3 Jul-Sep 2009

Effect of therapies on Roga Bala

	VIRECHANA-AVALEHA			AVALEHA		
	n	% Relief	Significancy	n	% Relief	Sigificancy
Frequency	10	52.77	P < .01	13	36.36	P < .01
Duration	10	52	P < .01	13	38	P < .01
Intensity	10	48	P < .01	13	37.65	P < .01
Dyspnoea	10	61.11	P < .001	13	42.71	P < .001
Pranavaha Srotodushti Lakshana	10	43.47	P < .01	13	39	P < .01
Asino labhate Saukhyam	10	61.90	P < .001	13	32.80	P < .05
Kaasa	9	54.90	P < .01	13	51.51	P < .001
Kaphanishtivanama	8	49.77	P < .001	12	33.14	P < .05
Shleshma Vimokshante Saukhyam	6	50	P > .05	10	18.18	P > .05
Kasatah Sanniraddhyate	5	71.42	P > .05	10	7.14	P > .05
Wheeze	10	66.66	P < .001	13	45.67	P < .001
Ronchi/Crypts	10	67.18	P < .01	13	33.22	P < .001
Peenasa	9	63.40	P < .01	13	42.71	P < .01
Urah/Parshvashula	8	61.53	P < .05	10	21.42	P < .05
Kanthoddhvasana	8	68.92	P < .05	9	36	P < .05
Trit/Vishushkasyata	8	43.50	P > .05	9	24.81	P > .05
Ushnabhinanadati	8	46.40	P > .05	12	20	P > .05
Absolute Eosinophil Count	10	24.79↓	P > .05	13	25.57↓	P > .05
PEFR	10	21.32↑	P < .001	13	6.30↑	P >.05

EFFECT OF THERAPY ON AGNI BALA

	VIRECHANA-AVALEHA			AVALEHA					
	n	% Relief	Significancy	n	% Relief	Sigificancy			
Jaranashakti	10	60.86	P < .01	13	39	P < .001			
Abhyavaharanashakti	10	50	P < .01	13	34.21	P < .01			
Aruchi	10	42.10	P < .05	13	36.23	P < .01			
Vata Mutra Purisha Retasa Mukti	10	66.66	P < .001	13	46.12	P < .001			
EFFECT OF THERAPY ON DEHA BALA									
Balauriddhi	10	45	P < .05	13	42	P < .001			
Swara Varna Yoga	10	66.66	P < .001	13	53.07	P < .01			
EFFECT OF THERAPIES ON CHETASA BALA									
Nidra	10	53.50	P < .001	13	68.66	P < .001			
Sukhena-cha-Pratibodhanam	10	58.82	P < .01	13	47.47	P < .001			
Mano-Buddhi-Indriya Ayappatti	10	50	P < .01	13	56.52	P < .001			
Vaikarika Swapna	6	71.42	P < .05	13	57.39	P < .01			
Нb	10	7.79↓	P > .05	13	2.38↓	P > .05			
ESR	10	0.2↓	P >.05	13	11.78↑	P > .05			
N	10	5.48↓	P > .05	13	4.91	P > .05			
L	10	7.3↓	P > .05	13	5.02↓	P > .05			
E	10	26.76↓	P > .05	13	41.95↓	P > .05			
TLC	10	3.33↓	P > .01	13	26.72↑	P > .05			

EFFECT OF THERAPY IN VIRECHANA-AVALEHA GROUP (V.A. GROUP):-

10 patients who have completed treatment in this group have showed 49.89% relief in Roga Bala, 59.80% on Deha Bala, and 53.88% on Agni Bala where as on Chetasa Bala it was 52.45%. Average percentage improvement obtained in this group was 51.93%. Thus in V.A. group Good improvement was seen on all these parameters i.e. Roga Bala, Deha Bala, Agni Bala & Chetasa Bala.

All sign & symptoms shows significant improvement in Roga Bala except Shleshma Vimokshante Saukhyam, Kasatah Sanniruddhyate, Trit & Ushnabhinandati. Objective parameters of Roga Bala i.e. P.E.F.R. was increased by 21.32%, where as A.E.C. reduced by 24.79%.

Improvement in Agni Bala & Deha Bala was also significant on all the symptoms of Deha & Agni Bala except on Sharira Upachaya i.e. weight gain, where no weight gain was observed in Single patient which indicates involvement of Rasadi Dhatu in pathogenesis.

Improvement in Chetasa Bala was also Significant except on Vaikarika Swapna. Improvement in Chetasa Bala is due to relief in Roga Bala obtained after treatment due to relief in Shvasakashtata, Kaasa, Peenasa etc, he can perform all his routine activities & feels better. Thus

improvement in Sharira Bala plays a major role in improvement of Chetasa Bala. It shows interdependence between Sharira & Mana in every disease process. On Haeamatocrit Values, Eosinophil Count was reduced by 26.76% also decline in all Haeamatocrit values was observed but all these are statistically insignificant.

EFFECT OF THERAPY IN AVALEHA GROUP (A):

In this group 13 Patients have completed course of treatment. Out of these 43.31% showed improvement in Roga Bala, 50.81% improvement was seen in Agni Bala, 56.19% improvement was observed in Deha Bala where as 63.20% improvement was noticed in Chetasa Bala. Thus total improvement in Avaleha group recorded was 37.46%.

All sign & symptoms included in Roga Bala shows significant improvement except Shleshma Vimokshante Saukhyam, Kasatah Sanniruddhyate, Parsva Shula, Trit & Ushnabhinandati. Objective parameter of Roga Bala i.e. P.E.F.R. was just increased by 6.30% where as A.E.C. was reduced by 25.57%. This change in A.E.C. was slightly grater than that obtained in Virechana - Avaleha group.

All Signs & symptoms included in Deha Bala, Agni Bala & Chetasa Bala showed significant improvement in this group. In this group also no improvement was observed on Sharira Upachaya i.e. weight gain. Following results were obtained on Haeamatocrit values. Eosinophil count was reduced by 41.95% which is almost double than that of Virechana group. Neutrophil & T.L.C was increased insignificantly whereas Haemoglobin was reduced by 2.3

OVERALL EFFECT OF THERAPY

Average percentage improvement observed in total score was 51.93% in Virechana- Avaleha group where as 37.46% improvement was reported in Avaleha group. 20% of patients had got complete remission in Virechana Avaleha group where as no complete remission was seen in Avaleha group. 40% of patient attained marked improvement in V.A. group where as it is only 23.07% in Avaleha group. 69.23% patient had improved in Avaleha group where as it is only 20% in V.A. group. No patient remains Unchanged in both these groups.

In nut shell Virechana with Shirishadyavaleha have more creditability in bringing out stable & maximum improvement in Tamaka Shvasa. Hence it can be said that Virechana may form important part of asthma management.

REFERENCES

- Ashtanga Hridaya with Commentaries, Sarvanga Sundara & Ayurveda Rasayana - Choukhambha Orienta1 lia, Eight Edition, Varanasi.
- Ashtanga Sangraha with Indu Commentary, C.C.R.A.S.New Delhi.
- 3. Charaka Samhita with Commentry of Chakrapani, Jalpakalpataru Explanatory notes; and Annotations of Mahamahopadhyaya Sri Gangadhara Kaviratna Kaviraja; Edited and Revised by Kaviraja Narendranatha Sengupta and Kaviraja Bataicanadra Sengupta; Published Samsrta Samsthana, New Delhi, Edition, 2002.
- 4. Charaka Samhita of Agnivesha with Ayurvedadipika Commentary of Chatrapani Dutta, Edited by Vaidya Yadavaji Trikamaji Acharya published by Choukhamba Publication
- 5. Harrison's principles of Internal Medicine 14th edition published by Tata Mc. Graw Ltd, New
- 6. GINA Pocket guide for Asthma Management