Multiple hot boil/ Furuncle

A boil (or furuncle) is a skin infection that is usually caused by the bacteria Staphylococcus aureus (staph). Other bacteria or fungi can also cause boils.

Clinical features

1. Furuncle starts as a hard, tender nodule up to 1-2 cm in diameter which develops around the hair follicle.

2. The nodule become painful and fluctuant with abscess formation after several days which ruptures with discharge of pus. Lesions may be single or multiple.

3. Site: Usually in hair bearing areas such as face, neck, axilla and pubic area.

Figure: Boil

Investigations

A) Routine: Complete blood count shows leucocytosis, blood sugar.

B) Special: Gram staining and culture of pus will show Gram positive Cocci

Management

1. Incision and drainage is a good treatment and widely practiced.
2. Systemic antibiotic- flucloxacillin (500 mg) 4 times daily for 7 days, cephradine 1-2 gm per day in divided doses and if methicillin resistant staphylococcus aureus (MRSA) suspected I/V vancomycin 1-2 gm/day in divided doses. Antibiotic should be changed according to C/S report.
3. Mupirocin ointment is usually used 3 times daily for 7 days.

Bullous impetigo

Usually occurs in infant and caused by Staphylococcus aureus.

Clinical features

1. Starts with vesicles that quickly involve into thin walled bulla 2-5 cm in diameter that may contain clean turbid fluid or pus.
2. Bulla quickly ruptures leaving a raw red base covered by a thin, flat, brownish crust with central healing and peripheral extension.
3. Site: Face commonly affected but may occur anywhere with wide and irregular distribution.

Figure: Bullous impetigo

Investigations

1. Complete blood count-leucocytosis
2. Urine R/M/E-in severe case may show hematuria.
3. ASO titer may be high
4. Gram stain and culture of exudate or pus to see causative organism.

Management

1. Personal hygiene and cleansing play vital role in the treatment of impetigo
2. Wound to be washed with normal saline, povidone iodine or chlorhexidine regularly twice daily for 7 days.
3. Antibiotic ointment or powder.

The following topical antibiotics are usually use in practice

-Mupirocin

-Fusidic acid

-Neomycin and bacitracin powder and spray

4. Systemic antibiotics

Systemic drug	Dose
Flucloxacillin	12.5-25 mg/kg body weight 6 hourly daily for 5-7 days
Amoxicillin plus clavulanic acid	Children 1-6 year 1 TSF 8 hourly for 7 days Children 6-12 year 2 TSF 8 hourly for 7 days
Azithromycin	10 mg/kg/day for 3-5 days
Clindamycin	10-25 mg/kg/day every 8 hours daily for 5-7 days
Erythromycin	50 mg/kg/day every 6-8 hours daily for 5-7 days

Superficial or common impetigo/impetigo contagiosa

It is the most common skin infection in children, accounting for approximately 10% of all cutaneous problems in pediatric caused by streptococci or staphylococci.

Clinical features

1. Starts with minute vesicles which turn into pustules and become crusted with inflammatory and erythematous margins.
2. Lesions gradually expand and are covered by yellow honey colour or brownish crusts.
3. Regional lymph adenopathy may be present if caused by streptococcus.
4. In severe cases fever and other constitutional symptoms usually present.
5. Site: Face especially around the nose, mouth, ear and extremities are commonly affected.

Figure: Impetigo contagiosa

Investigations: Same as bullous impetigo.

Treatment/management: Same as bullous impetigo

Tinea corporis

Clinical feature

1. One or more well demarcated, erythematous, slightly scaly macules or plaque like lesions with a slightly elevated border. Lesion expand peripherally with centrally healing.
2. Itching present.

Figure: Tinea corporis

Investigations

1. Microscopic examination with KOH preparation will show fungal hyphae.

2. Culture of skin scraping on Sabouraud's dextrose agar media will show growth of fungus within a week or two.

Management

1. Topical antifungal cream: Any of the miconazole, clotrimazole, econazole, terbinafine.
2. Systemic antifungal (adult dose)
    a. Griseofulvin 500 mg /day for 4-6 wks
    b. Fluconazole 50 mg/day for 4-6wks
    c. Ketoconazole 200 mg/day for 4-6wks
    d. Terbinafin 125 mg/day for 14 day

Tinea cruris

Clinical features

1. It is a superficial fungal infection of groin, pubic area, perianal and perineal skin occurring most frequently in men.
2. Multiple, erythematous papulo-vesicles with a well defined raised border with central clearing are usually seen in genitocrural areas and medial upper thighs. Lesion are bilateral but asymmetrical.
3. Pruritus of variable intensity is common
4. Chronic scratching may lead to lichenification

Figure: Tinea cruris

Investigation and management is same as tinea corporis

Tinea pedis

Tinea pedis is the term used for a dermatophyte infection of the soles of the feet and the interdigital spaces.

Clinical features

1. Moccasin types: Characterized by diffuse, fine, scaling in the planer surface and over sides of the foot. Scale is silvery white adherent and prominent in skin furrow.
2. Intertrigenous types: Characterized by scaling, itching, maceration and fissuring of interdigital space (mainly 4^{th} space).
3. Vesicular ring worm of feet: Deep seated vesicles, fuse to form bulla then rupture to leave painful, red erosions in the instep portion of sole and heal of the foot with severe pruritus.

Figure: Tinea pedes

Investigations and management is same as tinea corporis.

Onychomycosis

Onychomycosis, also known as tinea unguium, is a fungal infection of the nail.

Clinical feature

1. Distal subungual onychomycosis: Fungi invade distal area of nail bed and results yellow discolouration of lateral border of nail and production of subungual hyperkeratosis. Nail matrix remains uninvolved.

2. White superficial onychomycosis: Invade nail plates. Opaque, well demarcated, soft white spot appears on surface of nail plate. Surface of nail-soft, dry, powdery and can easily be scraped.
3. Proximal subungual onychomycosis: Invades posterior nail fold. Cuticle area, migrates to underlying matrix then nail plate from bellow. Hyperkeratotic debris accumulates; causes nail separation from nail bed.

Figure: Onychomycosis

Investigation: Nail clipping for fungus with KOH preparation and culture shows positive finding.

Management

1. Griseofulvin 1 gm daily for 6-12 month for finger nails and 12-18 month for toe nails (not use now a days due to headache and vertigo).
2. Terbinafine is the drug of choice. Dose of terbinafine is 250 mg daily for 3 month for toe nails and 6 weeks for finger nails.

Tinea capitis

Tinea capitis is the name used for infection of the scalp with a dermatophyte fungus.

Clinical feature

1. Kerion type: Manifests as raised, tender, indurate, edematous swelling studded with foliculopustules which rupture with release of exudates. Hairs may be shed, resulting in temporary baldness.
2. Black dot tinea: Non inflammatory large area of alopecia.

3. Favus: Characterized by yellowish, cup shaped crusts, scutula which is composed of skin debris and hyphae cicatrical hair loss is eventual.

Figure: Tinea capitis

Investigation

1. Wood's lamp examination
2. Microscopic examination with KOH preparation
3. Culture in Sabouraud's dextrose agar media.

Management

1. For treatment of all types of tinea capitis a systemic antifungal such as griseofulvin, terbinafine, ketoconazole, itraconazole should be used. Fluconazole may be used as second line therapy
    a. Griseofluvin 20-25 mg/kg/day
    b. Itraconazole 3-5 mg/kg
    c. Terbinafine 3-6 mg/kg/day
2. Topical antifungal cream like miconazole, clotrimazole, econazole, terbinafine should be used.
3. Topical preparations such as shampoos, lotions or solutions of selenium sulphide, zinc pyrithione, povidone iodine, ketoconazole may be used as adjunctive therapy.
4. In case of secondary infection azithromycin, erythromycin, cephalosporin should be used.

Erosio interdigital blastomycetica

Clinical feature

1. Usually seen in are finger webs as white macerated areas.
2. Fissuring of the center of the lesion is red colour and looks raw.
3. As the condition progresses the macerated area peels off, leaving a painful, raw, denuded area surrounded by a colour of overhanging white epidermis.

Figure: Erosio interdigital blastomycetica

Management

1. Application of topical antifungal agent.
2. Systemic antifungal is required in cases unresponsive to topical therapy.

Psoriasis

Psoriasis is a chronic autoimmune condition that causes the rapid buildup of skin cells. This buildup of cells causes scaling on the skin's surface.

Clinical feature

1. Lesions are usually flat, rounded, covered by dry white silvery scales.
2. History of itching usually absent.
3. Auspitz's sign and Koebner phenomenon is positive.

Figure: Psoariasis

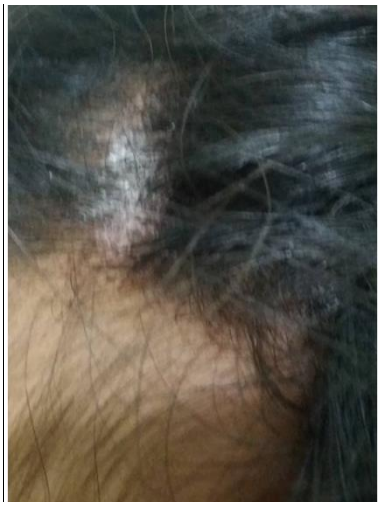

Figure: Scalp psoriasis

Figure: Flexural psoriasis

Psoriasis of palm and sole

Clinical feature

1. Usually associated with psoriasis of other sites and bilateral involvement.
2. Symmetrical, well defined, erythematous, thick plaques. Silvery scales may be profuse or minimal. Scales usually adherent to palm and sole. Associated characteristically with hyperkeratotic, erythematous plaques on knuckles and with spillage proximally into wrists and ankle.

Figure: Planter psoriasis

Figure: Palmar psoriasis

Investigation

1. Complete blood court
2. Blood glucose
3. Skin biopsy

Nail psoriasis

Clinical feature

1. Nail changes include pitting, nail plate thickening, subungual hyperkeratosis onycholysis and brown discoloration of nail plate.
2. Pits-large, irregular present in several nails due to nail matrix psoriasis.
3. Onycholysis which is separation of nail plate from nail bed.

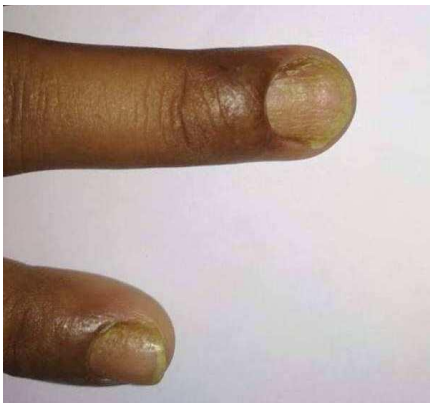

Figure: Nail psoriasis

Investigations

1. Complete blood count
2. Blood glucose
3. Skin biopsy

Management

1. Topical treatment
    a. Corticosteroid cream or ointment.
    b. Coal tar
    c. Salicylic acid
    d. Vitamin D and its analogues
    e. Tazarotene
    f. Emollients
2. Systemic treatment
    a. Methotrexate (MTX)
    b. Oral retinoids
    c. Psoralens and UVA therapy(PUVA)
    d. Cyclosporine
    e. Acitretin
3. Instrumental therapy
    a. Phototherapy and photochemotherapy
    b. Laser
    c. Climato therapy

Eczema

Eczema is a condition where patches of skin become inflamed, itchy, red, cracked and rough.

Acute Eczema

Clinical feature

1. Acute dermatitis characterized by an erythematous, edematous plaque which is ill defined and is surrounded by papule, vesicles, pustules and exudates which dries to form crusts.
2. History of itching or oozing present.

Figure: Eczema in hand

Investigation

1. CBC
2. Skin biopsy
3. Serological test-total serum immunoglobulin E Level.

Management

1. Soaking both in saline, potassium permanganate or aluminium acetate solution.
2. Topical corticosteroid cream e.g. clobetasol propionate, betamethasone hydrocortisone cream.
3. Systemic steroid- prednisolone or deflazacort for 1 to 2 weeks.
4. Antibiotic: to prevent secondary infection.
5. Antihistamine.

Discoid eczema

Clinical feature

1. Extremely itchy, multiple, sharply demarcated, cord shaped vesicular or crusted plaques.
2. The lesion run a chronic course.

Figure: Discoid eczema

Diagnosis is clinical.

Treatment: oral antibiotic, antihistamine and topical steroid ointment.

Atopic dermatitis

Clinical feature

1. Atopic dermatitis in infant
    a. Begins after age of 3 months.
    b. Itching with vesicle, papules which become exaudative.
    c. Begins on the face, but can involve any part of the body.
    d. Secondary infection is common.

Figure: Atopic dermatitis

2. Atopic dermatitis in children
    a) Extremely itchy, dry, leathery plaques
    b) Mainly on flexor aspect of the elbow and knee often a reverse pattern.
3. Atopic dermatitis in adult
    a) Intensely itchy, lichenified plaques.
    b) Sites: cubital fossa, poplitial fossa, neck.

Investigation

i) CBC
ii) Skin biopsy
iii) Total serum immunoglobulin E level

Treatment

i) Antibiotic
ii) Antihistamine
iii) Systemic steroid-prednisolone.
iv) Topical corticosteroid cream/ointment
v) Topical- emollients/moisturizers.

Seborrhoic dermatitis

Seborrheic dermatitis is a skin condition that can cause rough, scaly skin on the scalp and face. The common name for seborrheic dermatitis is dandruff.

Clinical feature: More common in adult male.

Infantile SD

1) Characterized by erythematous , greasy scales and crusts affecting the hairy areas and in the intertriginous fold. Face, chest and neck may also be affected.
2) There is a greasy, dirty, offensive crust covering the entire scalp.

Figure: Infantile SD

Adult SD

1. Ill defined plaque of erythema and greasy scaling present in scalp, face (nasolabial fold, eye brows, eye lash), retro auricular area, trunk (presternal and interscapular region, umbilicus) and in the flexoral area.
2. Itching present.

Figure: Adult seborrhoic dermatitis

Investigation: Diagnosis is usually clinical. Sometimes

1. CBC
2. Total serum immunoglobulin E level.

Treatment

1. Topical: Topical steroid combined with antifungal agent e.g. hydrocortisone 1% plus miconazole nitrate 2%.
2. Systemic:
    a) Antibiotic
    b) Antifungal agent-fluconazole or itraconazole for 1 month.

Irritant contact dermatitis (ICD)

ICD most frequently caused by occupational exposure either an industrial contact or as a house hold contact.

Clinical feature

1. Acute exaudative lesion: On exposure to a strong irritant.
2. Dry dermatitic lesion: Due to chronic, exposure to a weak irritant.
3. Agent causing irritant contact dermatitis: On exposure to either water, sweat, detergent, cleaning agent, solvent, abrasive dust.

Figure: Contact dermatitis

Investigation: Diagnosis is usually clinical.

Management

1. Avoid contact.
2. In case of acute dermatitis: Systemic antibiotic, antihistamine & topical steroid cream.
3. In case of chronic dermatitis systemic antibiotic, antihistamine and topical steroid ointment.

Allergic contact dermatitis (ACD)

Clinical feature may be described as acute, sub acute & chronic.

Acute ACD: Well demarcated erythema, edema, vesicle, papule & in severe cases bullae & exaudative erosion & cast present.

Sub acute stage: There is mild erythema & firm papules with small dry scales.

Chronic stage: Plaques of lichenification are present with scaly, rounded, flat topped papules, excoriation and hyperpigmentation.

Over all the site of involvement is localized initially at the site of contact but in the later stage it spreads to the contact sites.

Figure: Contact dermatitis of face of a 20 years old young lady due to applications of facial cosmetic cream for fairness.

Investigation:

1. CBC
2. Histopathology.
3. Patch Test.

Management

1. General measure: Identification & removal of causative agent.
2. Topical measure: Topical corticosteroid cream or ointment.
3. Systemic: Systemic steroid is required for severe cases of ACD. Short tapered course of prednisolone for one to two weeks may be sufficient.

Lichen simplex chronicus (LSC)

Lichen simplex chronicus (LSC) is a localized, well-circumscribed area of thickened skin (lichenification) resulting from repeated rubbing, itching and scratching of the skin.

Clinical feature

1. Extremely itchy, lichenified, hyperpigmented hyperkeratotic lesion.
2. Common sites:

- Nape of the neck.

- Legs.

- Genital area (e.g. scrotum, labia) perianal region in both sex.

Figure: Lichen simplex chronicus

Investigation

1. Skin biopsy
2. Patch testing
3. Potassium hydroxide preparation
4. Fungal culture

Treatment

1. Oral antibiotic e.g. azithromycin, levofloxacin, erythromycin for 7 days.
2. Anti histamine
3. Topical: Corticosteroid ointment with keratolytic (salicylic acid) agent.

Pompholyx

It’s a type of eczema that causes tiny blister.

Clinical feature

1. Recurrent episode

2. Presence of bland vesicles with instance itching. Present in the fingers, palms, soles. Lesions occasionally get secondary infection.

Investigation: Diagnosis is clinical.

Treatment: Systemic-antibiotic, antihistamine and topical corticosteroid cream or ointment.

Scabies

It is a parasitic disorder, caused by female Sarcoptes scabiei hominis. It is highly contagious.

Clinical features

1. Vesicular lesion at characteristic. Common sites e.g. finger webs, flexor aspect of the wrist, elbow, anterior & posterior fold of axilla, around the nipple, umbilicus & periumbilical region, genitalia & inner aspect of the thigh.
2. Intense itching worse at right.
3. Other family members may be affected.

Figure: Scabies

Investigation: Usually diagnose clinically.

Treatment

1. 5% Permethrin- apply from neck to toes after taking bath and keep for 8-14 hours. Needs to repeat after 7 days or 25% benzylbenzoate lotion: use from neck to toes. For 3 consecutive night.
2. Crotamiton 10% cream: apply for 3 consecutive days.
3. Oral Ivermectin : Is the only systemic agent for treatment of the scabies. This is given at a dose of 200 microgram/kg single dose. May be repeated after 2 weeks.

Lichen planus

Lichen planus is an inflammatory condition that can affect the skin, hair, nails and mucous membranes. Common in female, 10-40 years.

Onset: Acute or chronic

Clinical features

1. Extremely itchy
2. Violaceous, shiny, flat topped, polygonal papules of variable sizes on flexor of wrist, ankles, shin and lower back.

Figure: Lichen plus

Oral lichen planus

1. Involved in 50% of patients with cutaneous LP.
2. White, reticulate lacey pattern on the buccal mucosa, tongue and gingiva.

Figure: Oral lichen planus

Investigation: Usually diagnose clinically.

Treatment

In local LP: Systemic antibiotic, antihistamine and topical steroid ointment.

In extensive LP: Systemic antibiotic, steroid, antihistamine and topical steroid ointment.

Pemphigus vulgaris

It is idiopathic autoimmune disorder.

Clinical features

1. Skin lesions: Flaccid bulla develop on normal skin and rupture to form painful erosion which have a tendency to spread.
2. Mucosal lesion: Painful erosions which extend peripherally with shedding of mucosa, giving a ragged appearance.
3. Positive Nikolsky's and bulla spread sign.

Figure: Pemphigus vulgaris

Investigation:

1. Tzanck smear: Shows acantholytic cells.
2. Skin biopsy

3. Direct immunoflurocent test
4. Serological test

Management

General measures: Counseling about the nature of disease and necessity of continuing therapy during asymptomatic maintenance phase.

Supportive Care

1. Intensive barrier nursing if necessary.
2. Suspension beds for patients with extensive lesions.
3. Local hygiene of mucosal and skin lesions. Prophylactic as well as therapeutic use of antibiotics and anticandidal agents both topical and systemic if necessary.
4. Maintenance of nutritional, water and electrolyte balance.
5. Thermoregulation.

Specific treatment

1. Use of steroid and immunosuppressant drugs. Corticosteroid is the main stay of therapy.

Daily steroid therapy: Initially 1-1.5 mg/kg of prednisolone given daily for about 3 weeks to suppress disease. As the new lesions stop appearing and old lesions begin to epithelialize then steroid should taper slowly.

Monthly steroid therapy: 1-2 mg/kg of IV dexamethasone or oral betamethasone given for 3 consecutive days every month.

Immunosuppressive therapy:

1. Azathioprine: initially 2-3 mg/kg of body weight till clearing of disease.
2. Methotrexate: 15-25 mg/weekly combine with folic acid weekly.
3. Cyclophosphamide: As daily oral dose (50-200 mg) or as monthly IV bolus dose (500-1000mg) or both.

Dermatitis herpitiformis

Gluten sensitive enteropathy always associated**.**

Clinical features

1. Extremely itchy. Grouped edematous papule and small vesicles develop on normal or erythematous skin. Lesions are rapidly excoriated because of intense itching.

2. Repeated scratching may cause eczematous changes and secondary infection.
3. Site: Extensors and pressure points (back, buttocks, shoulder & sacral area, elbows and knees) of the trunk.

Figure: Dermatitis herpitiformis

Investigation:

1. Skin biopsy.
2. Direct immune fluorescence test
3. Serology

Treatment:

1. Gluten free diet

2. Oral-antibiotic, antihistamine, dapsone (100-200 mg daily for adult), sulfapyridine (1-1.5 gram daily).

3. Topical: Corticosteroid cream or ointment.

Acne vulgaris

Acne vulgaris, is a long-term skin disease that occurs when hair follicles are clogged with dead skin cells and oil from the skin.

Clinical feature

1. Patient is an adolescent.
2. Background is seen greasy with prominent follicular opening.
3. Eruption of papules, pustules, nodules and cysts, lesions heals with typical scrring.

4. Presence of comedone with typical distribution in face, upper part of the trunk and chest.

Figure: Acne vulgaris, with secondary infection (left corner picture)

Investigation: Diagnosis is clinical.

Treatment

1. Topical
   a) Retinoids: Retinoic acid, adapalene, isotretinoin, tazaroten.
   b) Benzoyl peroxide
   c) Topical antibiotics: Clindamycin, erythromycin
2. Systemic treatment
   a) Systemic antibiotic-tetracycline 250-500 mg twice daily, azithromycin 250 to 500 mg once daily, clindamycin 150 mg 3 times daily.
   b) Antiandrogen- cryproterone acetate, spironolactone 50-100 mg daily.

Vitiligo

Vitiligo is a long-term skin condition characterized by patches of the skin losing their pigment.

Clinical feature

1. Presence of depigmented macules (milky white) with scalloped border.
2. Presence of leucotrichia.
3. Presence of Koebner phenomenon

4. Predilection for sites of trauma.

Figure: Vitiligo

Investigation-CBC, S. TSH, FT3, FT4, Ig E level.

Management

1. Reassurnce and psychological support to the patient and family.
2. Assure that it is not contagious.
3. Use of sun screen
4. Topical corticosteroid
5. Systemic steroid
6. Phototherapy

Melasma

Melasma is a common skin problem. The condition causes dark, discolored patches on your skin.

Clinical feature

1. Brown/grey brown macular pigmentation with well defined scalloped margins.
2. Pigmentation darkens on sun exposure.
3. Site: symmetrically on cheeks, nose, forehead and chin.

Figure: Melasma

Investigation: Diagnosis is clinical.

Management

1. Photo/sun protection

- Avoiding sun at its peak
- Use of umbrellas
- Broad speetrum sun screen

2. Medical treatment

Use any of the following

-Hydroquinone 2-4% topically for 1 to 2 months.

-Azelaic acid : used topically as 10-20% cream topically for 1 to 2 months.

Other agent:

-Glycolic acid (6-12%) topically for 1 to 2 months.

-Kojic acid (1-4%) topically for 1 to 2 months.

Acute urticaria

Occurs due to hypersensitivity.

Clinical feature

1. Lesions begin as erythematous macules rapidly evolve into pale edematous wheels with a surrounding flare. Large lesion may be annular/arcuate with paler center.
2. Itching present
3. Duration <6 weeks
4. Triggers by infection, infestation, ingestants, inhalant, injection, insect bite or instillation.

Figure: Acute urticaria

Investigation: Diagnosis is clinical.

1. Skin prick test
2. Flurosence enzyme immune assay.
3. Serum radioallergo sorbent test.

Management

1. Elimination of triggers
2. Antihistamine
3. Antibiotic
4. Topical steroid cream
5. If urticaria is severe then start oral steroid

Urticarial vasculitis

Aetiology:

1. Infection (hepatitis B and others)
2. Drugs (see below)
3. Underlying systemic disorders

Drugs:

Antimicrobial

- Sulfonamides

-Tetracycline

-Ampicillin

- Erythromycin
- Antitubercular

Anticonvulsant - phenytoin

NSAID-indomethacin, aspirin.

Clinical feature

1. Urticarial lesions that subsides after more than 72 hours with bruise like hyperpigmentation. Often associated with abdominal pain and arthritis.
2. History of itching present
3. Site: lower extremities

Figure: Urticarial vasculitis

Investigations

1. CBC
2. RBS
3. Skin biopsy-peri vascular neutrophilic infiltrate with nuclear dust.
4. Immunopathology: Perivascular deposition of immune complexes containing IgM.

Treatment

In mild disease

1. Eliminate triggers
2. Systemic antibiotic
3. Antihistamine
4. Topical steroid

In severe cases- systemic steroids

DLE

Clinical feature

1. Discoid or annular plaques with follicular plugs and adherent scales which show carpet tack keratotic spikes on the undersurface on removal.
2. Central depigmentation with atrophic scarring with peripheral hypepigmentation and erythema.
3. Typical distribution on face, ears and scalp.

Figure: DLE

Investigations

1. Skin biopsy
2. Direct immunoflurosence assay

Management

In localized lesions

1. Topical steroid
2. Intralesional steroids- triamcinolone acetonide
3. Topical immunomodulators: Tacrolimus 0.03% or 0.1%.

Extensive lesions

1. Anmalarial-hydroxychloroquine 200 mg BD for 2 weeks followed by OD
2. Oral steroids, thalidomide, dapson

Pitted keratolysis

Clinical feature

1. Fine, punched out, often elongated pits which become confluent to give a cibriform pattern.
2. Sites of predilection- soles (usually pressure points and web spaces). Associations with feet wet, soggy and malodorous. Patient often have keratoderma and hyperhydrosis.

Figure: Pitted keratolysis

Treatment

1. Prevention

-Control excessive sweating by topical alluminium chloride.

- Proper foot wear

2. Active lesion manage by using topical antibiotics and benzoyl peroxide (5% gel or cream) for 4 weeks. Oral erythromycin in extensive cases.

Erythrasma

Erythrasma is a superficial skin infection that causes brown, scaly skin patches. Causative agent: Corynebacterium, predisposing factors; warm, humid climate.

Clinical feature

1. Usually asymptomatic or itchy, well defined, irregular, scaly, uniformly pink but more frequently brown macules.
2. Common sites -interdigital spaces (between toes), axilla, groins and submammary area.

Figure: Erythrasma

Investigations

1. Wood's lamp test
2. Skin scraping

Treatment

In localized lesions: Topical antifungal cream, antibiotics (erythromycin, sodium fusidate) or benzyl peroxide gel used for 2 weeks.

In relapsing lesions: Clarithromycin 1 gram single oral dose.

Viral warts (Verruca)

Clinical feature

1. Single /multiple, circumscribed, firm, dome shaped papules with verrucous dry surface, stippled with black dots. May be arranged linearly due to auto inoculation.
2. About 60% of common warts resolve spontaneously.

Figure: Viral warts

Management

1. Topical agent
   Salicyclic acid
   Trichloroacetic acid
   Retinoic acid (0.05-0.1%)
2. Electrocoutery
3. Cryotherapy

Herpes zoster

Caused by varicella zoster virus.

Clinical feature

1. Severe pain
2. Usually unilateral, segmental distribution.
3. Presence of group vesicles on erythematous oedematous skin, rapidly evolve into pustules then crust.
4. The lesion usually confined to a single dermatome.

Investigations: Usually diagnose clinically.

Management:

1. Oral antibiotic to prevent secondary infection.
2. Antihistamine
3. Both oral and topical antiviral drug-acyclovir: 800 mg 5 times a day, famciclovir: 500 mg TDS for 7 days, valacyclovir: 1gram 3 times/day for 7 days.
4. Analgesic
5. For neuropathy-pregabaline, amitryptylline.

Pityriasis rosea

Clinical feature

1. Pityriasis rosea is an acute, self-limited, exanthematous skin disease characterized by the appearance of slightly inflammatory, oval, papulosquamous lesions on the trunk & proximal areas of the extremities.
2. The eruption commonly begins with a "herald" or "mother" patch, a single round or oval, rather sharply delineated pink or salmon-colored lesion on the chest, neck or back.
3. Size 2 to 5 cm in diameter.
4. A few days later similar lesions in appearance to the herald patch, appear in crops on the trunk & proximal areas of the extremities.
5. The eruption spreads centrifugally or from the top down in just a few days.
6. The long axis of these oval lesions tend to be oriented along the lines of cleavage of the skin, like a christmas tree pattern.
7. Then the lesions fade without any residual scarring.

Treatment

1. Reassurance
2. Topical steroids
3. Antipruitic lotions
4. Phototherapy
5. Erthyromycin in severe cases
6. Rash usually persists for 2-3 months

Tinea versicolor

Tinea versicolor is a common superficial infection caused by the organism Pityrosporum orbiculare. Which is a saprophytic yeast that is part of the normal skin flora.

Clinical feature

1. Lesions can be hypopigmented, light brown or salmon colored macules.
2. A fine scale is often apparent, especially after scraping.
3. Individual lesions are typically small, but frequently coalesce.
4. Lesions are limited to the outermost layers of the skin.
5. Most commonly found on the upper trunk & extremities, & less often on the face and intertriginous areas.
6. While most patients are asymptomatic, some complain of mild pruritus
7. The diagnosis of tinea versicolor is confirmed by direct microscopic examination of scale with 10 % potassium hydroxide (KOH).

Figure: Tinea versicolor

Treatment

1. Topical antifungals
2. Oral antifungals can be used for more extensive disease: Ketocanozole 400 mg single dose. Fluconazole and itraconazole are also effective.

Alopecia areata

Clinical features

1. Alopecia areata can manifest as many different patterns. It is a reversible, recurrent, nonscarring type, patchy loss of hair, occurring in sharply defined areas and usually involving the beard or scalp, eyebrows, eyelashes but can affect any hair bearing area.
2. Usually the hair loss is asymmetric and it may be accompanied by burning, stinging, tenderness or pain.
3. Complete loss of scalp hair is called alopecia totalis and complete loss of all hair as alopecia universalis.

Figure: Alopecia areata

Investigation

Usually diagnose clinically

Management

Topical treatments

A) Corticosteroids

1. Intralesional steroids are first line treatment in this case. Triamcinolone acetonide is used most commonly; concentration vary from 2.5-10 mg/ml. A concentration of 5 mg/ml is usually sufficient on the scalp. Injections are administered every 4-6 weeks. Topical steroids are useful, especially in children who cannot tolerate injections.
2. Fluocinolone acetonide cream 0.2% twice per day induce a satisfactory to excellent response.
3. Betamethasone dipropionate cream 0.05% can be used in patients with alopecia totalis or alopecia universalis.
4. Clobetasol propionate may induce regrowth. Regrowth was maintained for at least 6 months after cessation of therapy

B) Minoxidil: 5% solution appears to be more effective, 10 to 20 drops are applied twice per day regardless of the extent of the affected area for 3-6 months

Systemic treatments

1. Psoralen plus UV-A, both systemic and topical PUVA therapies can be used
2. Systemic steroids
3. Cyclosporine
4. Tacrolimus
5. Methotrexate

Androgenic alopecia

Clinical feature

1. Androgenic alopecia starts gradually. Men present with gradual thinning in the temporal areas, producing a reshaping of the anterior part of the hairline
2. Women with androgenic alopecia usually present with diffuse thinning on the crown. Bitemporal recession does occur in women but usually to a lesser degree than in men. In general women maintain a frontal hairline.

Investigation

1. Serum dehydroepiandrosterone sulfate and testosteron is needed to confirm virilization evident in women.
2. If a thyroid disorder is suspected- serum TSH, T3, T4.

Management

In this case topical minoxidil and systemic finasteride are widely used

1. Topical minoxidil 2% or 5% apply topically at evening daily for 1 to 3 month.
2. Systemic finasteride 1 mg/day for 1 to 3 months.

Folliculitis

It is a common skin condition in which hair follicles become inflamed. It's usually caused by a bacterial or fungal infection.

Clinical features

1. Patient may have history of use of razor
2. Clusters of small red bumps or white-headed pimples that develop around hair follicles
3. Pus-filled blisters that break open and crust over
4. Itchy, burning skin
5. Sites- face, scalp, chest, back, buttocks, groin, and thighs. It does not affect the eyes, mouth, palms, or soles, where there are no hair follicles.
6. On examination- a large swollen bump usually seen around hair follicles, tenderness present.

Figure: Folliculitis

Investigation- diagnosis is clinical. Pus (if any) should be sent for C/S.

Management

1. Avoid shaving if possible. If not then shave with care. Avoid tight cloths.
2. Topical and oral antibiotic. Antibiotic needs to change according to the C/S report.

Some common skin disease

Figure: Acne vulgaris

Figure: Epidermal nevus

Figure: Psoariasis

Figure: **Flexural psoriasis on crural region**

Figure: Tinea corporis

T. corporis

Figure: Acrodermatitis enteropathica

Figure: Herpes zooster

Figure: Exfoliative dermatitis

Figure: Scabies

Figure: Tinea capitis

Figure: Dermatitis herpatiformis

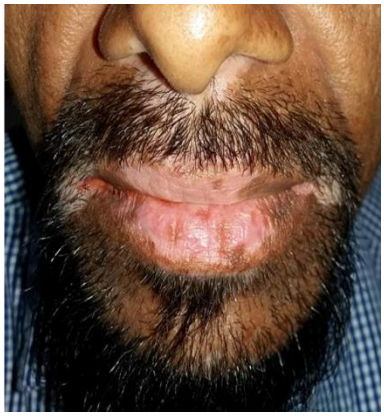

Figure: Vitiligo

Figure: Foliculitis

Figure: Icthyosis vulgaris