



Cutaneous Tuberculosis & Leprosy





Cutaneous Tuberculosis

- Etiology
 - Mycobacterium Tuberculosis
- Incidence
 - 4% of TB

Transmission

- Exogenous
 - Direct Inoculation
- Endogenous
 - Contiguous spread
 - Auto-inoculation
- Haematogenous

Common Types

- Scrofuloderma
- Lupus Vulgaris
- Warty Tuberculosis

Scrofuloderma

- Due to direct extension of infection from underlying focus of tuberculosis in lymph node, bone or joint





Clinical features

- Bluish-red painless swelling
- Breaks open to form ulcers & sinu
- Heal with scarring
- Cervical, Axillary and Inguinal lymph nodes frequently involved



Lupus Vulgaris



- Second most prevalent form presenting mostly as chronic indurated Plaque
- Pathogenesis
 - Contiguous Spread
 - Haematogenous
 - Lymphatic
 - Exogenous inoculation
 - Site of BCG vaccination



Clinical Features

- Common Sites
 - Head & Neck esp around nose
 - Arms & Legs
- Morphological Types
 - Plaque Form
 - Ulcerative & mutilating
 - Papular & Nodular



Plaque Form

- Usually Solitary reddish-brown
- Irregular, serpiginous edge
- Smooth or dry psoriasiform surface
- Chronic lesions show irregular scarring







Complications

- Scarring & Deformities
- SCC & BCC



D/D

- Deep Mycosis
- Leprosy
- Sarcoidosis



Warty Tuberculosis

- Chronic warty Plaque-like Lesion due to direct inoculation of organism into skin



Pathogenesis

- Physicians, pathologists & post-mortem attendants may acquire accidentally from external source
- Auto-inoculation with sputum in a patient with active tuberculosis
- Children & adults may become infected by sitting or playing where the organism is present

Clinical Features

- Indurated Warty Plaque
- Irregular extension leading to serpiginous outline
- Central crusting may show





Sites

- Hands
- Knees
- Ankles
- Buttocks

D/D

- Warts
- Deep Fungal Infections
- Atypical Mycobacterial Infections

Management

- Standard Antituberculous Therapy
- Manage complications

Leprosy

- Chronic granulomatous disease caused by *Mycobacterium Leprae*, principally affecting peripheral nerves & skin



Transmission

- Nasal discharges from untreated lepromatous leprosy patients
- Contact with skin lesions unimportant (Bacilli not excreted by skin)



Incubation Period

- Tuberculoid Leprosy upto 05 years
- Lepromatous Leprosy upto 20 years



Clinical types

- Indeterminate
- Tuberculoid
- Borderline
- Lepromatous

Indeterminate Leprosy

- Ill-defined patch
- Hypopigmented or slightly erythematous
- Sensory impairment(may be)
- Nearby nerve thickening (may be)
- Mostly on face of children



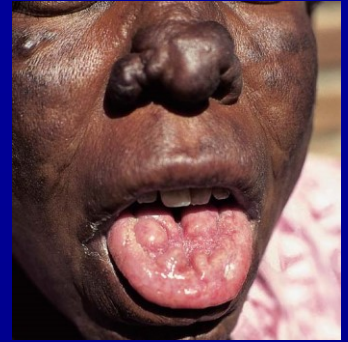
Tuberculoid Leprosy

- Localised form with good immunity
- Lesions
 - One or few
 - Well-marginated
 - Hypopigmented or erythematous
 - Anaesthetic
 - Dry surface with atrophy & hair loss
 - Nearby nerve thickened





Lepromatous Leprosy



- Disseminated form in patients with poor immunity
- Extensive cutaneous & systemic involvement
- Cutaneous Lesions
 - Numerous symmetrical
 - Macules, papules, nodules
 - Ill-defined, confluent





Lepromatous Leprosy

- **Systemic involvement**
 - **Lymphadenopathy**
 - **Hepatosplenomegaly**
 - **Ocular involvement**
 - **Testicular atrophy**

Borderline Leprosy

- Clinical features overlapping both tuberculoid & Lepromatous Leprosy

Complications

- Immunological reactions type 1 &2
- Motor Palsies(Facial,Claw hand,foot drop)
- Ocular
- Trophic ulcers
- Deformities

Investigations

- **Slit-Skin Smears**
- **Skin Biopsy**
 - **Well-defined granulomas in Tuberculoid**
 - **Ill-defined granulomas with full of foamy macrophages**

Diagnostic Criteria

- At least 02 of following
 - Presence of skin lesions
 - Peripheral nerve involvement
 - Acid-fast bacilli in skin smears

Treatment

- Indeterminate, tuberculoid & Borderline tuberculoid
 - Duration of treatment 06 months
 - Follow-up 02 years
 - Supervised Monthly Rifampicin 600mg
 - Unsupervised Daily Dapsone 100mg

Treatment

- **Lepromatus & borderline lepromatous**
 - **Supervised monthly**
 - **Rifampicin 600mg**
 - **Clofazimine 300mg**
 - **Unsupervised daily**
 - **Dapsone 100mg**
 - **Clofazimine 50mg**

Situations when you must think of Leprosy

- **Anaesthetic skin lesion**
- **Simultaneous skin lesion & peripheral nerve involvement**
- **Thickened peripheral nerves esp. at sites of predilection**