

LEPROSY - klas HANSEN D.

- Chronic granulomatous inf.
- Incubation period: yrs. (2-10 yrs)
- pt. asymptomatic till 20 yrs.
- Affects: - skin, peripheral Nerves, up. resp. Tract, eyes, Testes, Bones, Joint, Muscle.

only bac. to infect P. Nerve.

Etiology myco. leprae = obligate intracellular, AFB, Gram +ve.

has DCPA oxidase activity

- Grows better in cooler areas
 - ↳ skin, PN, eye chamber, Testes.
- spare warm areas
 - ↳ Groin, Axilla, scalp.

stain - pink straight = living org B.
 ↳ granular, fragmented = Nonliving leprosy B.

★ Viable in env ⇒ 10 days

Epidemiology dev. country. — Asia, Africa.

Pathogenesis

- Bacterial Antigen = DNA glycolipid.

- lipopolysaccharide (cell membrane)
↓
depress immune activity.
↓
by $\ominus$ macrophage activation.

- Org. phagocytosed by T

histocytes

schwan cell

skin

P. Nerve

inflammatory response.

form of Mauve (hypopigmented or erythematous.)

Types

Leptomatous - paucibacillary - ^{eye} upresp. sys

Tuberculosis - Multibacillary $\rightarrow$ PN, skin

Borderline $\rightarrow$ (BL) - both type ke effect

Battery Load

Battery load

Clinical
feature

Tubercloid Type = ↑ host resistance

- hypopigmented patches.

- partial / Total loss of cutaneous sensation in affected area

- Thickening of Nerve
+nce AFB in skin, Nasal smear.

Tuberculous → single/multiple macule.
- erythematous eruption & dermal &
peripheral Nerve Trunk ⇒ loss of sensation.
+ ⇒ Loss of sweating in affected area.

lepromatous - early erythematous macules,
Papules ↓
skin thickening & Nodule formation
↓
severe disfigurement.

★ In Facial N. Involvement ⇒ facial paralysis.

Advanced Features	- Nodules, lump in skin. - leonine facies, ears. - disfigurement of finger, Toe, Nose. - Nasal depression. - Foot drop, claw toe.
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★ chronic types of disease.
may cause sudden death.

Oral Manifestation	small tumor like mass ↓ LEPROMA ← can ulcerate
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Site - tongue, lip, hard palate.
- gingival hyperplasia & loosening teeth.
paralysis facial & max. div. Trigeminal N.

Also has
Odontodysplasia
leprosy

children

premaxilla gets affected due to invasion

- Granulomatous invasion of pulp.
- circumferential hypoplasia
- short roots in max. Ant Teeth.
- pinkish discoloration of crown.

Histologic Feature

Granulomatous Nodule

- fibrous stroma = epithelioid histiocytes
- lymphocyte.
- langhans giant cell.
- vacuolated macrophage = lepra cell.

Tuberculoid Type - org ↓ → AF stain req.

lepromatous → ↑ org.

Diagnosis

culture = footpads of mice,
armadillos.

- Nasal smear.

- Z-N stain (modified)

↑ Bailli conch $> 10^{11}$ g tissue.

- Morphologic index - no. of AFB stained
brightly w.r.t. viability

- Bacteriologic Index - density of org in
dermis.

can be 4+ - 6+.



drop by 1 every year on
effective treatment.

- skin Biopsy; Nerve Biopsy.
- ELISA, PCR.

Hypopigment. disorder = leishmaniasis
Sarcoidosis.
Yaws, lupus vulgaris

children → sweat function Test.

Lepromin Test → To detect susceptibility.

Treatment MDT → Rifampicin, Dapsone,
Clofazimine.

Tuberculosis → R + D — 6 months

leprosy → R + D + C — 6 months