

LYMPHADENOPATHY – Exam Ready Notes

Definition

Enlargement of lymph nodes due to inflammatory, infectious, or neoplastic causes.

Mechanism of Lymph Node Enlargement

- Proliferation of lymphocytes or reticuloendothelial cells
- Infiltration by abnormal cells (lymphoma, leukemia, metastasis)
- Increased phagocytic activity due to antigenic stimulation
- Storage of metabolic products (lipid storage diseases)

Causes of Lymphadenopathy

1. Neoplastic

- Lymphomas (Hodgkin & Non-Hodgkin)
- Acute leukemia
- Chronic lymphocytic leukemia
- Myeloproliferative disorders
- Metastatic carcinoma (lung, breast, kidney, head & neck)

2. Infectious

- Tuberculosis
- Syphilis
- Filariasis
- Infectious mononucleosis
- Bacterial infections (Staph, Strep, Salmonella)
- Viral (CMV, EBV)

3. Immunologic / Inflammatory

- Rheumatoid arthritis
- SLE
- Dermatomyositis
- Serum sickness
- Drug reactions

4. Others

- Sarcoidosis
- Endocrine (Hyperthyroidism, Addison's)
- Lipid storage diseases (Gaucher, Niemann-Pick)

Clinical Features of Important Conditions

Acute Lymphadenitis

- Fever, tender lymph nodes
- Skin red, hot, edematous
- Primary septic focus present

Tuberculous Lymphadenitis

- Common in children
- Cervical nodes commonly involved
- Stages: enlargement → matting → caseation → cold abscess → sinus

Syphilitic Lymphadenitis

- Painless, firm, discrete nodes
- Generalized lymphadenopathy in secondary stage
- Rash (coppery), mucous patches

Filariasis

- Inguinal lymph node involvement
- Fever, pain, scrotal swelling
- Microfilaria in blood

Infectious Mononucleosis

- Fever, sore throat, lymphadenopathy
- Splenomegaly
- Atypical lymphocytes

Hodgkin's Lymphoma

- Painless, rubbery nodes
- Pel-Ebstein fever
- Reed-Sternberg cells

Lymphosarcoma

- Rapid growth, firm mass
- Fixed nodes

Metastatic Nodes

- Hard, fixed nodes
- Irregular surface

Chronic Lymphocytic Leukemia

- Painless generalized lymphadenopathy
- Splenomegaly
- Increased lymphocytes