

# Lymph Nodes and Lymphatic Drainage of Upper Limb

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### Lymph Nodes

#### Major Groups Related to Upper Limb

##### 1. Supratrochlear (epitrochlear) nodes

- Location ? above medial epicondyle of humerus.
- Drain ? medial fingers, medial hand, medial forearm.
- Clinical ? enlargement in **infections of hand/forearm**.

##### 2. Axillary lymph nodes (already studied in axilla)

- **Pectoral (anterior)** ? anterior chest wall, breast.
- **Subscapular (posterior)** ? posterior chest wall, scapular region.
- **Humeral (lateral)** ? most of upper limb (except those with cephalic vein).
- **Central** ? receive from above groups.
- **Apical** ? receive from central nodes and cephalic vein lymphatics; drain into subclavian trunk.

## Lymphatic Drainage

### Superficial Lymphatics

- Accompany **superficial veins**.
- Along **basilic vein (medial)** ? to supratrochlear nodes ? humeral axillary nodes.
- Along **cephalic vein (lateral)** ? directly to apical axillary nodes.

### Deep Lymphatics

- Accompany **deep veins** (radial, ulnar, brachial).
- Drain into humeral axillary nodes.

### Final Pathway

- All axillary nodes ? **apical nodes** ? **subclavian lymph trunk** ? **thoracic duct (left)** or **right lymphatic duct (right)** ? venous system.

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### Clinical Anatomy

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- **Infections of hand/forearm** ? cause **painful enlargement of supratrochlear nodes**.
- **Axillary lymphadenitis** ? due to infections or metastatic spread (e.g., breast carcinoma).
- **Sentinel lymph node biopsy** ? detects earliest spread of breast cancer (commonly involves anterior/pectoral group).
- **Tuberculosis** ? causes matted axillary nodes; may form cold abscess.

- **Lymphedema of upper limb** ? seen after axillary node dissection (post-mastectomy).
- **Virchow's node (left supraclavicular node)** ? may be involved in metastatic spread from thoracic/abdominal cancers (though not directly upper limb, important clinically).