

Lymphatic Examination

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Communication skills

- Meet & greet
- Introduce yourself
- Get approval for examination

Hand washing

HISTORY

- Age
- Duration
- Symptoms
- First affected group
- Primary focus
- Past history
- Family history

Age

- Acute lymphadenitis can occur at any age.
- Tuberculous lymphadenopathy & syphilis occur at young age.
- Primary malignant lymphomas occur at young age.
- Secondary malignant (metastatic) lymphadenopathy occurs in old age.

Duration

- Short in acute lymphadenitis.
- Long in chronic lymphadenitis, eg tuberculosis.

Symptoms

- Swelling
- Pain
 - painful in both acute & chronic lymphadenitis.
 - painless in syphilis, primary malignant lymphomas
 & secondary carcinoma.

Fever

- Evening fever in tuberculosis.
- In filariasis a periodic fever (esp. during the full or new moon) is common.
- In Hodgkin's disease intermittent bouts of remittent fever.
- Loss of appetite & weight

Pressure effects

- Swelling of face & neck
 - due to enlarged superior mediastinal nodes or nodes at the root of neck.
- Edema & venous congestion of lower limbs
 - Due to enlarged retroperitoneal & para-aortic nodes.
- Dyspnea in enlarged mediastinal nodes.
- Dysphagia when esophagus is compressed.

First affected group

- Cervical lymph nodes first affected in many cases of hodgkin's disease, & tuberculosis.
- Inguinal lymph nodes first affected in filariasis, & lymphogranuloma inguinale.

Primary focus

- Enquire about the symptoms in the drainage area of lymph nodes.
- An insignificant abrasion or inflammation in the drainage area may lead to lymphadenitis.

Past history

- enlarged cervical nodes in past tuberculosis (cervical node or lung).
- enlarged iliac nodes in recurrent penile or testicular carcinoma.
- Enlarged epi-trochlear & suboccipital nodes may occur in the secondary stage of syphilis.

Family history

- Sometimes tuberculosis runs in families.
- Lymphosarcoma & lymphomas have also familial tendency.

LOCAL EXAMINATION

- Inspection
- Palpation

Inspection

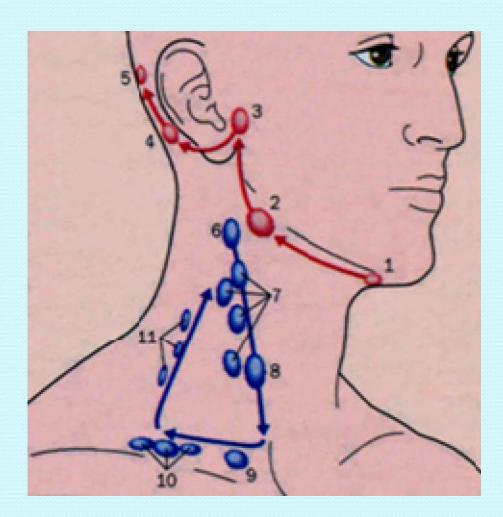
- Swellings
 - Site, size, shape,
 - surface, edge,
 - overlying skin,
 - pulsation,
 - cough impulse,
 - number, &
 - pressure effect.

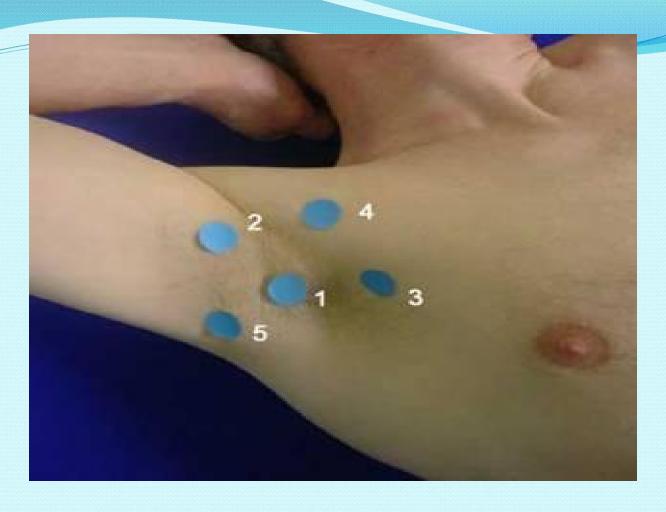
Palpation

- temperature, tenderness,
- site, size, shape,
- surface, edge,
- consistency,
- fluctuation, translucency,
- cough impulse, reducibility,
- compressibility, pulsatility, &
- mobility.

Cervical lymph node scheme

Submental → submandibular → preauricular → postauricular → occipital → jugulo-digastric → anterior cervical (internal jugular) → jugulo-omohyoid → scalene → supraclavicular → posterior cervical (external jugular).





- 1. MEDIAL (CENTRAL)
- 2. LATERAL (BRACHIAL)
- 3. ANTERIOR (PECTORAL)
- 4. INFRACLAVICULAR
- 5. POSTERIOR (SUBSCAPULAR)

Axillary lymph node scheme











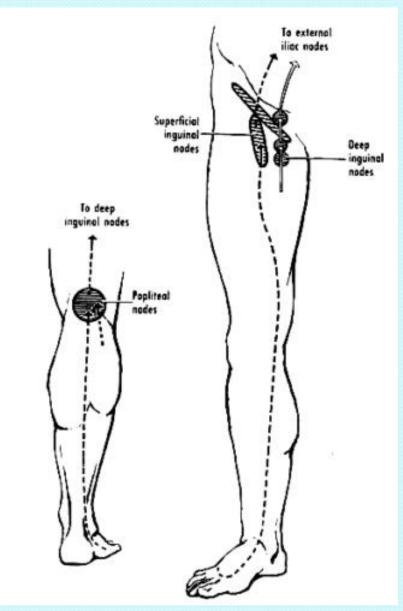
Anterior group, medial (& apical) group, lateral group, posterior group, & supraclavicular nodes



Epitrochlear nodes



Inguinal lymph node scheme





DRAINAGE AREA EXAMINATION

- Cervical & supraclavicular nodes.
 - Submental node → Chin, central lip, gingiva, floor of mouth & tip of tongue.
 - Submandibular nodes → Palate, tongue, floor of mouth, lower lip, cheek, gingiva, nose & antrum.
 - Jugular chain → Tongue, mouth, pharynx, larynx, upper esophagus & thyroid gland.
 - Tonsillar node → Tonsil.
 - Supraclavicular nodes → If left supraclavicular (Virchow's)
 nodes are enlarged (Troisier's sign), one should examine not
 only the arm, breast & chest (bronchus) but also the abdomen
 right down to the testis.

- Axillary lymph nodes
 - Ipsilateral upper limb.
 - Ipsilateral half of the skin of trunk, extending from the clavicle to the level of umbilicus (including the breasts).

Inguinal lymph node

- Ipsilateral lower limb.
- Skin of the lower part of the abdomen below the level of the umbilicus.
- Buttock & lower part of the back.
- Penis & scrotum.
- Perineum, vulva & anus.
- Terminal parts of the anal canal, urethra & vagina.

DON'T FORGET TO EXAMINE

- Other regional lymph nodes
- General examination
 - Malnutrition, cachexia, anemia & weight loss.
- Examination of abdomen
 - includes rectal, vaginal & scrotal examination.
 - Hepatosplenomegaly & mesenteric & iliac lymphadenopathy may be found in hodgkin's disease.
- Examination of lungs
 - In cases of cervical lymphadenopathy.

The End!