



Figs 16.24A and B: Inspection of the axilla with raised arm is very important clinical method.



Fig. 16.25: Palpation of left axilla using right hand.



Fig. 16.26: Palpation of right axilla using left hand.

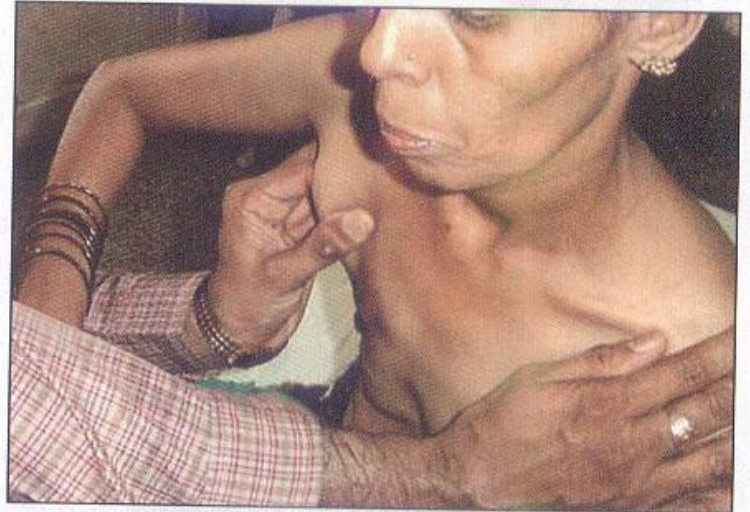


Fig. 16.27: Examination of pectoral group of lymph nodes.



Fig. 16.28: Examination of central group of lymph nodes.

patient. By raising the arm and forearm of the patient from opposite side the posterior axillary fold is palpated between thumb and fingers (**Figs 16.30A and B**).

Apical nodes are palpated (for right axilla) with left hand of the examiner placing high in the axilla with right hand supporting over the shoulder and supraclavicular region of the same side of the axilla. It is often difficult to palpate (**Fig. 16.31**).



Fig. 16.29: Examination of lateral group of lymph nodes.



Fig. 16.31: Examination of apical group of lymph nodes.



A



B

Figs 16.30A and B: Examination of posterior group of lymph nodes.



Fig. 16.32: Examination of supraclavicular group of lymph nodes.

Supraclavicular nodes are palpated using fingers over supraclavicular fossa by standing behind the patient who is asked to shrug the shoulder (**Fig. 16.32**).

Axillary nodes on opposite side are also examined. Opposite axilla can be examined by examiner standing on the same side by leaning over the patient or can be examined by standing on the opposite side. Its involvement signifies stage IV disease. It is confirmed by FNAC.

Levels of the axillary nodes (Berg's levels) (Fig. 16.33)

Level I—Below and lateral to the pectoralis minor muscle—anterior, lateral, posterior

Level II—Behind the pectoralis minor muscle—central

Level III—Above and medial to pectoralis minor muscle—apical

Note: Total number of nodes in the axilla is around 50.

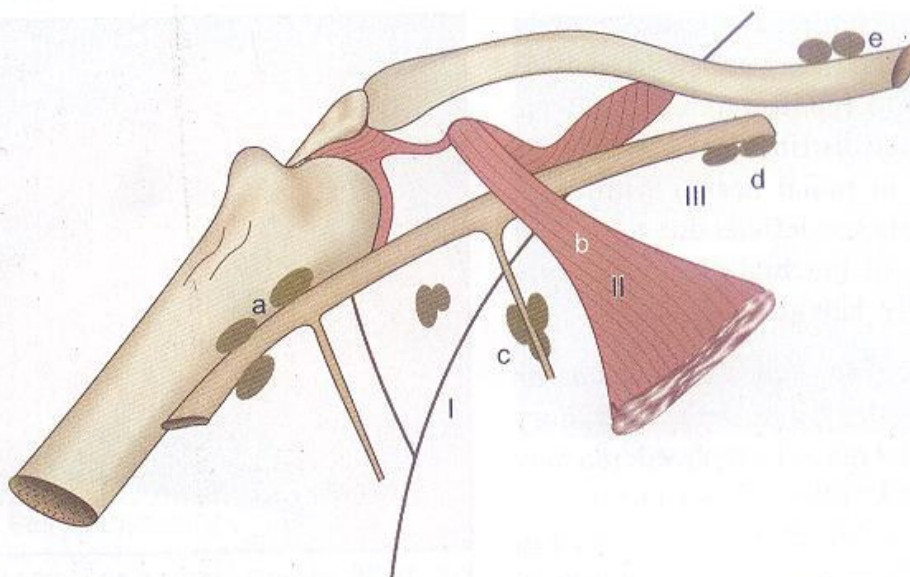


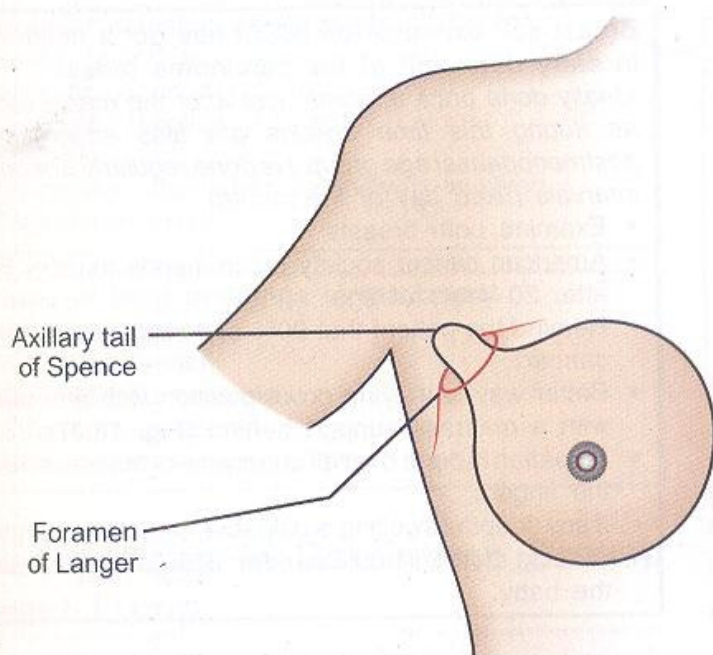
Fig. 16.33: Surgical levels of lymph nodes in the axilla draining from breast. a: Lateral group, b: Central group, c: Pectoral group, d: Apical group, e: Supraclavicular group.

Note

- Spread restricted to Level I nodes carries better prognosis
- Spread to Level II has poor prognosis
- Spread to Level III indicates worst prognosis

Axillary tail of the Spence: It is the extension of the upper outer quadrant of breast across foramen Langer deep to deep fascia. Foramen Langer is an opening in deep fascia over outer aspect of the breast which allows part of breast tissue to extend under deep fascia,

otherwise rest all breast tissue is in subcutaneous plane. Axillary tail is located adjacent to outer border of the pectoralis major muscle. When it is involved by carcinoma it should be differentiated by pectoral node enlargement. Axillary tail will move along with main breast tissue whereas pectoral node will not move when breast is moved as it has got independent mobility. Axillary tail often extends over the lateral edge of the pectoralis major muscle up to axilla (**Figs 16.34A and B**).



Figs 16.34A and B: Axillary tail of Spence. It is actually part of upper outer quadrant. Tumour in the axillary tail of Spence which is fungating.

Fixed enlarged axillary nodes can cause lymphoedema due to lymphatic block; venous thrombosis and venous oedema due to venous block; and severe excruciating pain along the distribution of the median and ulnar nerves (rare in radial nerve) with often significant sensory and motor deficits due to tumour infiltration of the cords of brachial plexus (usually medial cord occasionally lateral cord).

Examination of arms for venous oedema or lymphoedema: Venous oedema may be due to axillary vein compression by nodal mass. Lymphoedema may be due to lymphatic block following nodal involvement. Lymphoedema is mainly distal. It is gradual in onset and progressive. Venous oedema is sudden in onset, with bluish discolouration over the skin, uniform in both distal and proximal aspect of the upper limb (forearm and arm).

Examination for mediastinal node involvement: It is done by percussion. Initially percuss for liver dullness. Percussion is done one space above from lateral to medial, to look for widened mediastinal border. Mediastinal nodes are common in middle mediastinum.

Examination of respiratory system: It is done for secondaries—altered breath sounds, features of consolidation or pleural effusion are looked for (**Fig. 16.35**).



Fig. 16.35: Look for pleural effusion and altered breath sounds for secondaries in lungs.



Fig. 16.36: Always examine abdomen for liver enlargement, ascites or Krukenberg tumour (in premenopausal age).

Examination of abdomen: To look for palpable nodular liver, Krukenberg tumours in ovaries in menstruating age group, and ascites. It is completed with digital examination of rectum (P/R), and per vaginal examination (**Fig. 16.36**).

Examination of pelvis, spine, long bones for any swelling/tenderness/pathological fracture/restricted movements of spine, hips, etc.

Examination of central nervous system to look for any neurological deficits following metastatic disease in the brain.

Breast self examination (BSE) has got a major role in early detection of the carcinoma breast.

Ideally done once a month, just after the menstruation, as during this time breasts are less engorged. In postmenopausal age group it is done regularly at monthly intervals (fixed day of the month).

- Examine both breasts
- American cancer society recommends monthly BSE after 20 years of age
- Remind the patient that 90% of breast lumps are not cancer
- Better way is in lying down position with arm raised with a mattress support behind (**Fig. 16.37**)
- Palpation is done over all quadrants of the breast using the fingers
- If any doubtful swelling is palpable, consult the surgeon
- Nursing mother should perform BSE just after feeding the baby.

Assessment of nipple deviation: Nipple changes are assessed by inspection, palpation and measurement. Displacement of nipple is assessed by measuring