Upper Limb

- **Subscapular** (**posterior**) **nodes** on the posterior axillary wall in association with the subscapular vessels drain the posterior axillary wall and receive lymphatics from the back, the shoulder, and the neck.
- Central nodes are embedded in axillary fat and receive tributaries from humeral, subscapular, and pectoral groups of nodes.
- Apical nodes are the most superior group of nodes in the axilla and drain all other groups of nodes in the region. In addition, they receive lymphatic vessels that accompany the cephalic vein as well as vessels that drain the superior region of the mammary gland.

Efferent vessels from the apical group converge to form the subclavian trunk, which usually joins the venous system at the junction between the right subclavian vein and the right internal jugular vein in the neck. On the left, the subclavian trunk usually joins the thoracic duct in the base of the neck.

In the clinic

Breast cancer

Lymphatic drainage from the lateral part of the breast passes through nodes in the axilla. Significant disruption to the normal lymphatic drainage of the upper limb may occur if a mastectomy or a surgical axillary nodal clearance has been carried out for breast cancer. Furthermore, some patients have radiotherapy to the axilla to prevent the spread of metastatic disease, but a side effect of this is the destruction of the tiny lymphatics as well as the cancer cells.

If the lymphatic drainage of the upper limb is damaged, the arm may swell and pitting edema (lymphedema) may develop.

Axillary process of the mammary gland

Although the mammary gland is in superficial fascia overlying the thoracic wall, its superolateral region extends along the inferior margin of the pectoralis major muscle toward the axilla. In some cases, this may pass around the margin of the muscle to penetrate deep fascia and enter the axilla (Fig. 7.58). This axillary process rarely reaches as high as the apex of the axilla.

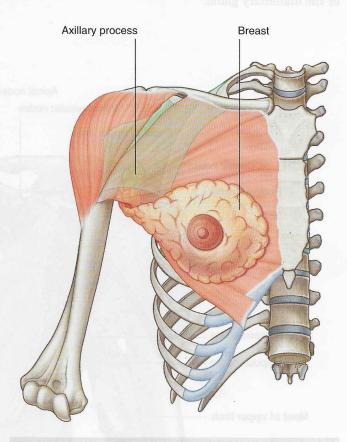


Fig. 7.58 Axillary process of the breast.