Lymphatic system

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FORMATION AND TRANSPORT OF TISSUE FLUID

Lymphoid tissue (containing lymphocytes and macrophages)

Blood vessels

Capsule

Lymph node

Lymph vessel carrying lymph

Heart

Capillary bed

Interstitial fluid

Cell products and debris

Cells

Pathogens

Lymphatic capillaries

Lymphatic capillary → Lymphatic vessel → Lymph node → Lymphatic vessel → Lymphatic trunk → Collecting duct → Subclavian vein
- right and left jugular trunks
- right and left subclavian trunks
- right and left bronchomediastinal trunks
- right and left lumbar trunks
- intestinal trunk
LYMPHATIC DUCTS

Right lymphatic duct

- Formed by union of right jugular, subclavian, and bronchomediastinal trunks
- Ends by entering the right venous angle
Thoracic duct
- Begins in front of L2 as a dilated sac, the cisterna chyli, (38-45 cm)
- formed by left and right lumbar trunks and intestinal trunk
• arches forwards and descends to enter the left venous angle
• before termination, it receives the left jugular, Subclavian and broncho mediastinal trunk
DRAINAGE PATTERN

RIGHT LYMPHATIC DUCT (1.2 cm) Receives lymph from right half of head, neck, thorax and right upper limb, right lung, right side of heart, right surface of liver

THORACIC DUCT - Drains lymph from lower limbs, pelvic cavity, abdominal cavity, left side of thorax, and left side of the head, neck and left upper limb
Regional Lymph drainage
Axillary lymph node

- Apical axillary nodes
- Central axillary nodes
- Lateral thoracic artery
- Lateral axillary nodes
- Pectoral axillary nodes
- Axillary process

- Internal thoracic artery
- Pectoralis major muscle
- Secretory lobules
- Suspensory ligaments
- Lactiferous ducts
- Lactiferous sinuses
- Retromammary space
- Parasternal nodes
- Mammary branches of internal thoracic artery

Lymphatic and venous drainage passes from lateral and superior part of the breast into axilla.

Lymphatic and venous drainage passes from medial part of the breast parasternally.
Spleen

- Superior
- Gastric area
- Renal area
- Hilum
- Splenic vein
- Splenic artery

- Heart
- Spleen
- Kidney
- Pancreas
Tonsils

- Pharyngeal tonsil
- Palatine tonsil
- Lingual tonsil
Thank you