

Right and Left Mediastinal Views

Features of Right and Left Surfaces of The Mediastinum

Right and left mediastinal views are mirror images of the impressions on the medial surfaces of right and left lungs respectively. Some of the relations are very specific for right and left views. These are as follows:

RIGHT MEDIASTINAL VIEW

1. Right atrium
2. Inferior vena cava
3. Superior vena cava
4. Right brachiocephalic vein

Upper four structures occupy the anterior part of the mediastinal view just behind the sternum.

5. Azygos vein – It is a vertical vein over the vertebral bodies behind the heart. Reaching the level of sternal angle it arches forwards above the root of right lung to enter the superior vena cava.
6. Trachea – It lies in the upper part of the mediastinum in a plane posterior to the superior vena cava and right brachiocephalic vein.

LEFT MEDIASTINAL VIEW

1. Left ventricle – It lies in the anterior part of this view just behind the sternum.
2. Arch of aorta – It arches over the root of the left lung.
3. Descending thoracic aorta – It is continuation of arch of aorta and lies just behind the heart.
4. Left common carotid artery.
5. Left subclavian artery.

Above two arteries ascend from arch of aorta of which the former is more anterior.

6. Thoracic duct – It is a vertical lymphatic duct lying in the upper part of this view in a more posterior plane, even behind the subclavian artery.

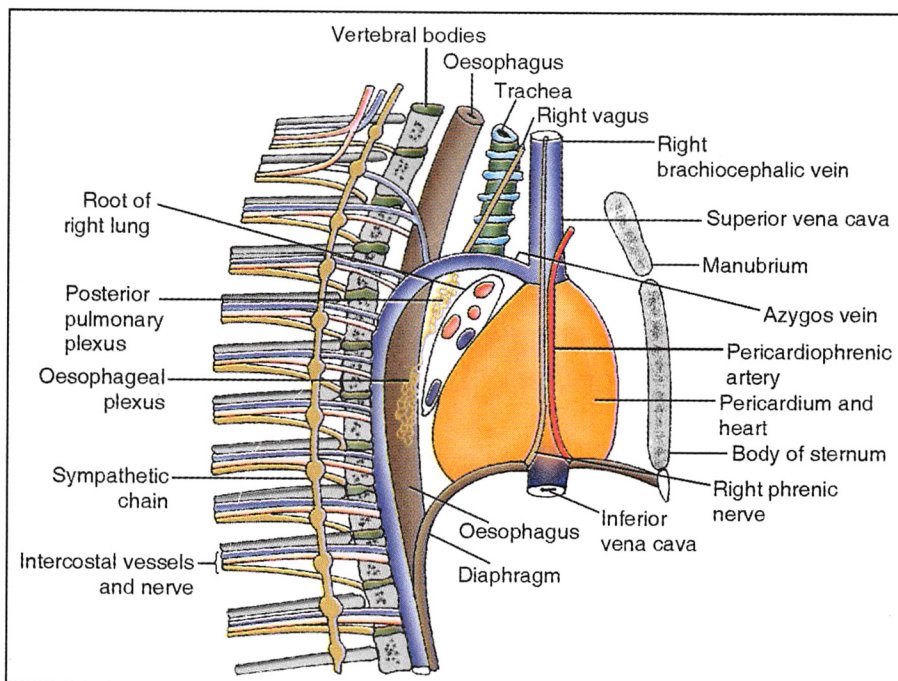


Fig. 9.1 Right mediastinal view

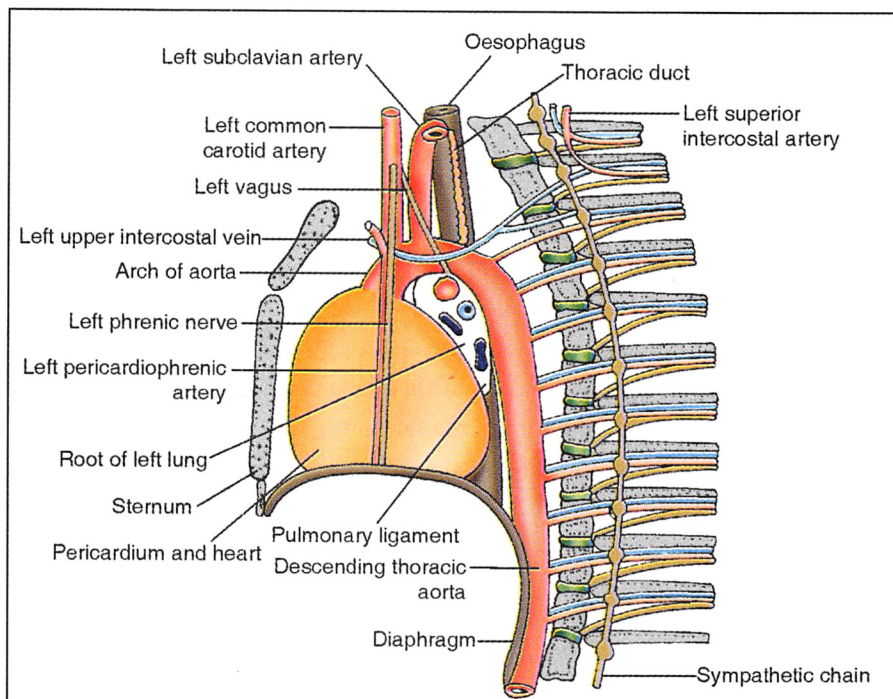


Fig. 9.2 Left mediastinal view

DISSECTION STEPS FOR MEDIASTINUM AND HEART IN SITU

Define the boundaries and subdivisions of the mediastinum. Clean the pericardium and note the phrenic nerve and pericardiophrenic artery. Cut the fibrous pericardium on both sides in front of phrenic nerves vertically and join the lower ends of incision by a transverse cut about 1 cm above the diaphragm. Define and note the attachments of pericardium to the superior vena cava, aorta and the pulmonary trunk. Now, maintaining small flap on these structures cut through them. Identify the various pericardial sinuses and correlate with its development. Remove the fibrous pericardium and study the heart in situ. Note its anatomical position. Identify coronary arteries, major cardiac veins.

The following additional features are alike on the two sides.

1. Pericardium. Covers the heart and occupies a large area behind the body of the sternum.
2. Root of lung. Structures entering into or appearing from lung constitute its root. It is located behind the upper part of the fibrous pericardium. It is covered by the connecting pleura which is loose and hanging below – called the pulmonary ligament.
3. Sympathetic chain. It descends by the side of the vertebral column.
4. Intercostal nerves and vessels. These occupy the intercostal spaces close to the lower border of the ribs.
5. Phrenic nerve.
6. Pericardiophrenic artery.
Above two structures descend vertically over the fibrous pericardium.
7. Vagus nerve. The right vagus crosses the trachea obliquely to reach the back of the root of the right lung. The left vagus crosses the left surface of the arch of aorta to reach the posterior surface of root of left lung. (Phrenic-front and Vagus – behind).
8. Oesophagus. It is prominently visible on the right side behind the trachea in the upper part and in front of azygos vein in the lower part. On the left side it is crossed by the thoracic duct in the upper part. It is also visible between the lower part of the fibrous pericardium and descending thoracic aorta.