

CRUX OF MRCS
 PLANES, LEVELS AND SURFACE MARKINGS
 KEY ANATOMICAL LANDMARKS AND STRUCTURES BY VERTEBRAL LEVEL

Level / Plane	Landmark / Plane	Key Structures & Events	Major Arterial Branches
C3	Hyoid bone	Middle constrictor attachment; internal branch of superior laryngeal nerve nearby	—
C4	Upper border thyroid cartilage (Carotid tubercle)	Carotid bifurcation; top of thyroid; jugular vein crossing	—
C6	Cricoid cartilage	Trachea begins (cricotracheal membrane); oesophagus starts; vertebral arteries enter foramina	—
T4–T5	Sternal angle (Angle of Louis)	Aortic arch begins/ends; tracheal bifurcation; azygos → SVC; transverse thoracic plane	—
T8	—	Caval opening in diaphragm (IVC + phrenic nerve branches)	—
T10	—	Oesophageal hiatus (oesophagus + vagal trunks + oesophageal branches)	—
T12	—	Aortic hiatus (aorta + thoracic duct + azygos vein)	Inferior phrenic (paired, parietal), coeliac trunk (unpaired, visceral)
L1 (Transpyloric plane)	Midway suprasternal notch → pubic symphysis	Pylorus, hilum of kidneys, origin SMA, pancreas neck, duodenojejunal flexure, gallbladder fundus	SMA (unpaired, visceral), middle suprarenal (paired, visceral)
L1–L2	—	—	Renal arteries (paired, visceral)
L2	—	—	Gonadal arteries (paired, visceral)
L1–L4	—	—	Lumbar arteries (paired, parietal)
L3	—	—	Inferior mesenteric artery (unpaired, visceral)
L3–L4	Iliac crest level	Lumbar puncture landmark	—
L4	Aortic bifurcation	Aorta → common iliac arteries	Median sacral (unpaired, parietal), common iliac (terminal)
L5	—	Common iliac veins join to form the IVC	—