

Aorta Ultrasound

More Information: Anatomy of the Inferior Vena Cava

The inferior vena cava (IVC) is the largest vein in the body. The IVC originates at the L5 level when the common iliac veins come together. The IVC ascends in a much straighter course than the abdominal aorta and is located to the right of the aorta (patient's right) anterior to the lumbar vertebra.

The IVC travels in a cephalad direction to its ultimate destination, the right atrium. Prior to reaching the right atrium, the hepatic veins empty into the anterior aspect of the IVC. The renal veins empty into the IVC on its posterior lateral aspect

Even though the IVC consists of three muscular layers (intima, media, and adventitia), the wall thickness is much less than that of the aorta. The normal IVC is usually less than 25 mm in diameter and its diameter varies throughout the respiratory cycle. The diameter will also vary with the patient's fluid status. Patients who are significantly hypovolemic may have IVC diameters less than 15 mm, while patients who are fluid overloaded (i.e. CHF) may have IVC diameters greater than 25 mm.