



# HIVINFORMATION BULLETIN SERVICE

# DIAPHRAGMATIC OPENINGS

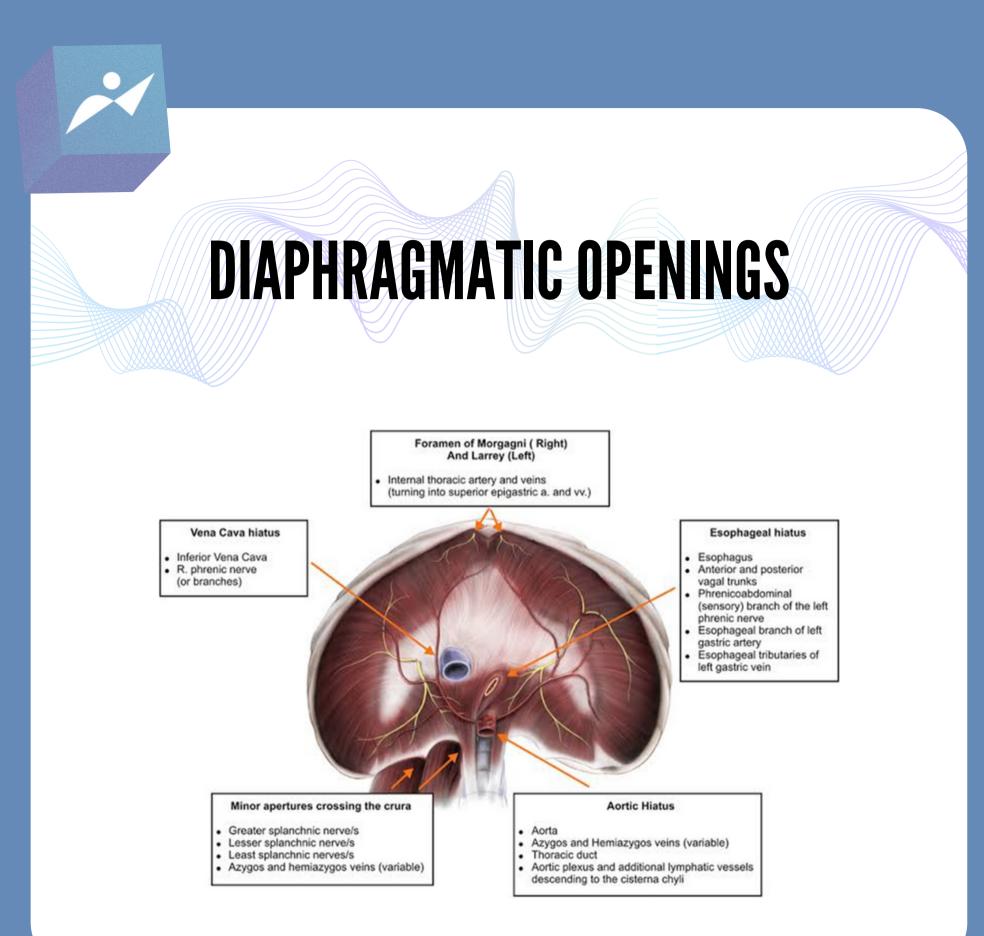


### **HOBSBYNEXTICS** DAILY INFORMATION BULLETIN SERVICE

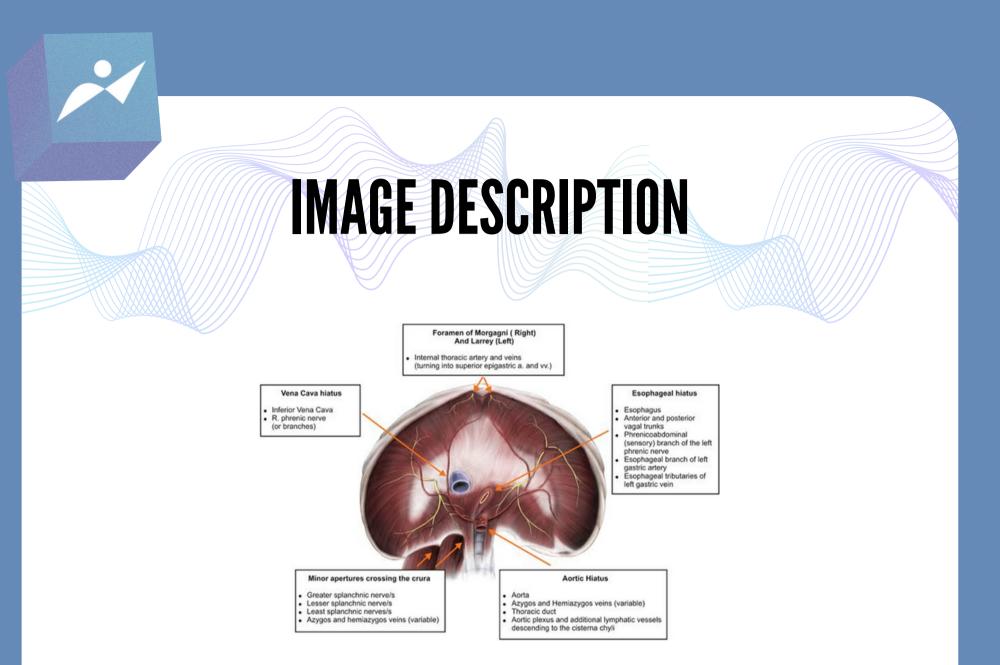
# **OPENINGS IN THE DIAPHRAGM**

As it forms a solid barrier between the abdominal and thoracic cavities, three large openings are needed in the diaphragm to allow the esophagus, aorta, vena cava, and associated nerves to pass through.









- An anatomical illustration showcasing diaphragmatic openings: Q8, T10, T12, and crus. Various structures pass through, including the inferior vena cava, phrenic and vagus nerves, aorta, thoracic duct, and veins.
- The diaphragmatic Q8 opening facilitates central abdominal connection and support.
- Phrenic nerves traverse T10, ensuring respiratory signals and motor control.
- T12, the muscular part opening, aids in breathing and posture.
- Crus of the diaphragm at various levels accommodates essential structures.
- Azygous vein occasionally passes through the right crus, adding variability.



# LEVEL OF OPENING

- **Q8:** Located centrally in the diaphragm.
- **T10:** Positioned in the central tendon of the diaphragm.
- **T12:** Extends into the muscular part of the diaphragm.
- **Crus:** Found in the crus of the diaphragm.



# **STRUCTURES PASSING THROUGH**

- Inferior Vena Cava: Transverses the diaphragm.
- **Phrenic Nerves:** Right phrenic nerve passes through.
- **Vagus Nerves:** Right and left vagus nerves traverse the diaphragm.
- **Aorta:** Major vessel passing through the diaphragm.
- **Thoracic Duct:** Passes through the diaphragm.





- Space of Larry: Located in the Costo-Xiphoid gap.
- **Medial Arcuate Ligament:** Accommodates the sympathetic chain.
- Lateral Arcuate Ligament: Allows passage for subcostal nerves and vessels.
- **Splanchnic Nerves:** Pass through the right and left crus.
- **Azygous Vein:** May traverse through the right crus.





#### **Question:**

## Which structure may occasionally pass through the right crus of the diaphragm?

A) Vagus Nerve
B) Inferior Vena Cava
C) Aorta
D) Thoracic Duct

Answer: B) Inferior Vena Cava

