

Histology Practical

Wall of the Heart



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Main features of the Heart :

- Presence of heart valves
(middle)
- Muscular wall

Wall of the Heart :

If they give it in exam , they will ask about myocardium 😊

- Endocardium (most inner)
- Myocardium (middle)
- Epicardium cannot see here (most outer)
simple mesothelium

Pericardium:
Made of two layers:
Parietal (outer)
Visceral (inner) = Epicardium
Between the two layers there is serous fluid

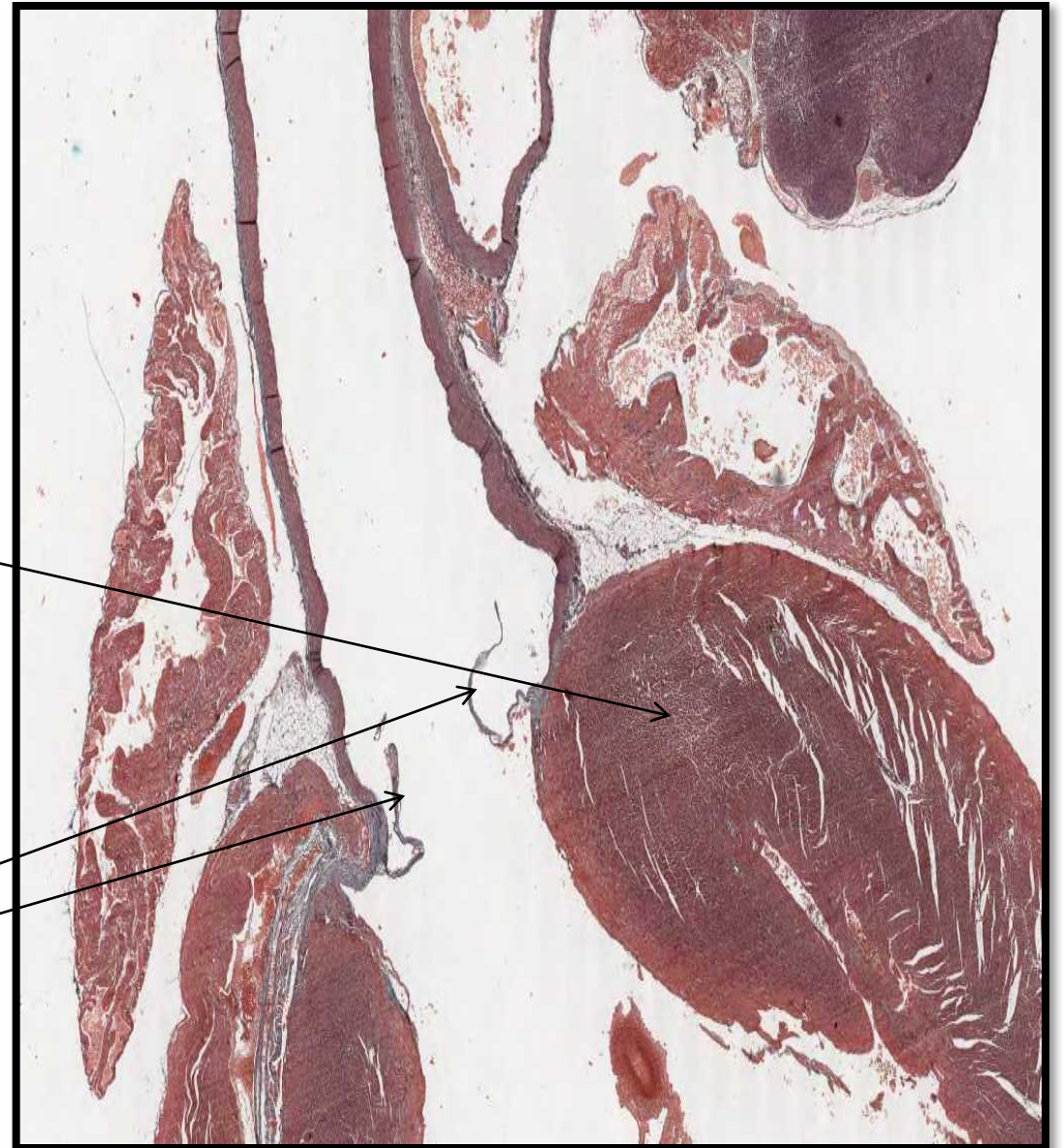
Valve



Wall of the Heart :

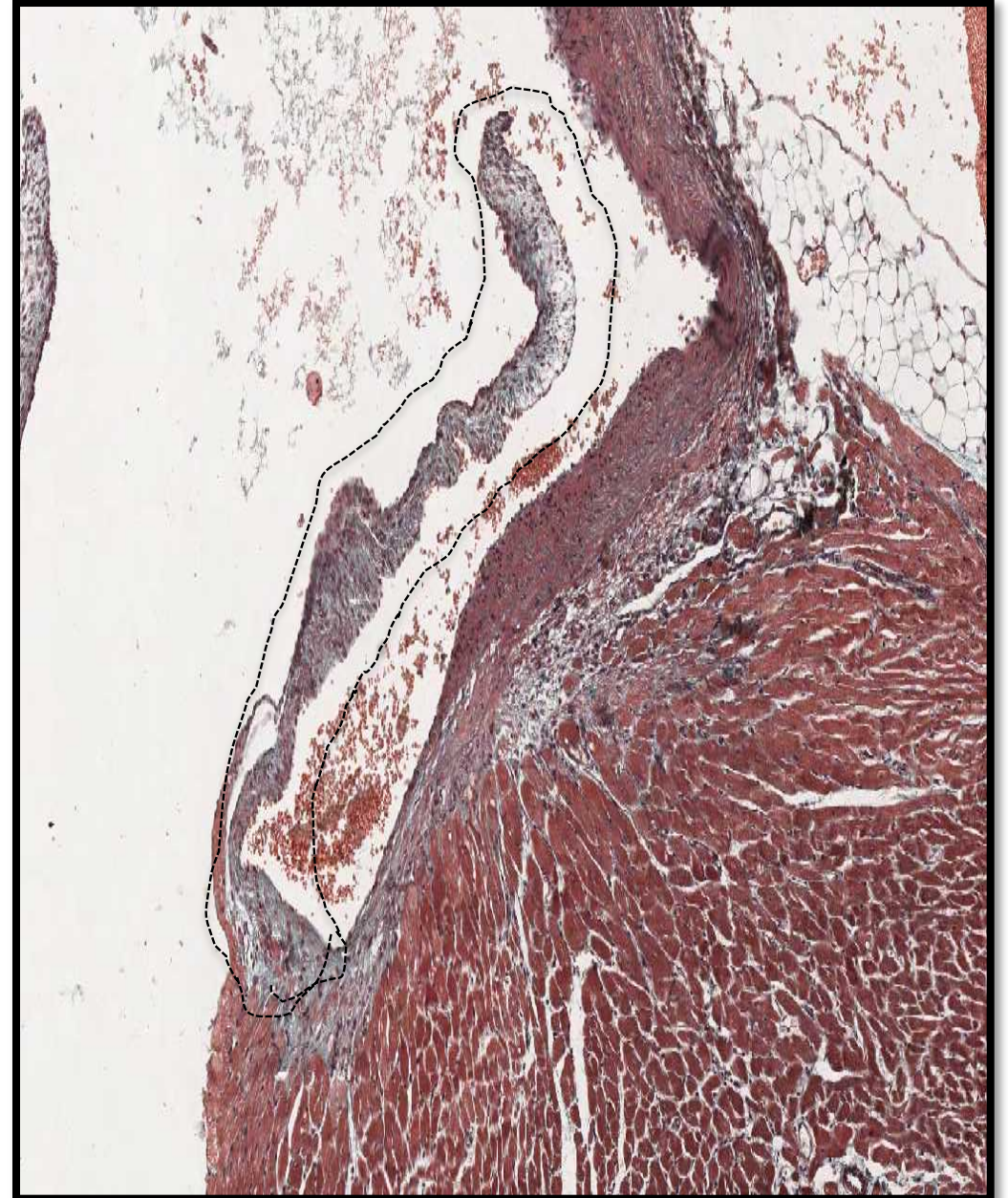
- Endocardium
(most inner)
- Myocardium
(middle)
- Epicardium
(most outer)

▪ Cardiac Valves



Cardiac Valve

- Each cusp of heart valve is formed of:
- **A core of Dense irregular C.T.**
Avascular ← Main feature
- This core is covered by: **Endothelium**
- **Blood vessels are found in the base (root) of the valve and provide nutrients**



Endocardium

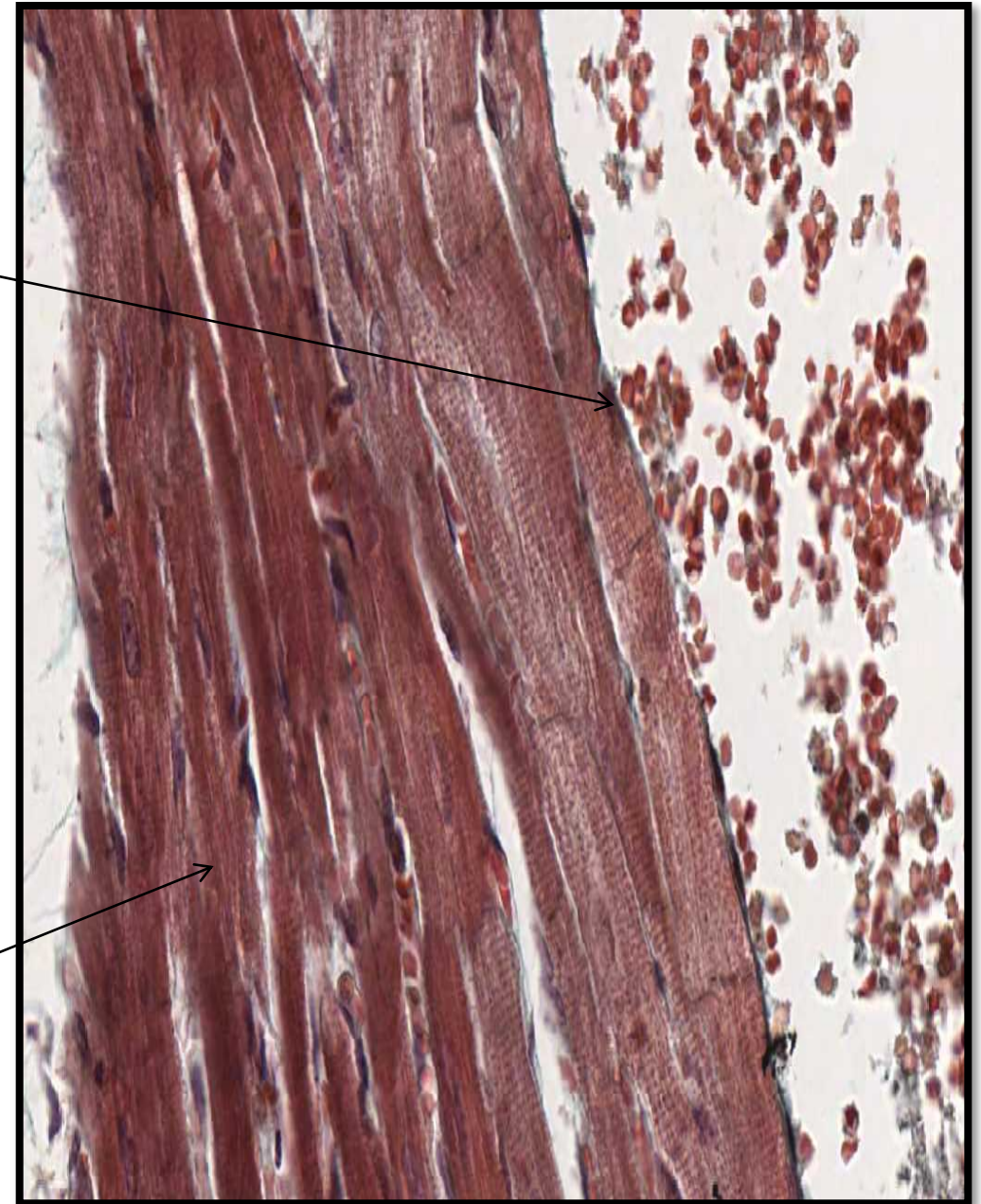
- Endothelium: simple squamous epithelium

It's the thin layer and you can see the flattened nuclei if you look closely

- Subendothelial C.T. layer
- Dense C.T. layer
- Subendocardial layer
 - Purkinje fibers
 - small blood vessels
 - nerves

May ask ((what are the layers of endocardium))..

Myocardium



Myocardium

- **Blue arrow:**
Intercalated disc between cardiac muscle cells
It's the white line
- **Black arrow:**
Endomysium (loose C.T.)
- **Nuclei of myocardial cells**
Central and round nuclei
- **Nuclei of fibroblasts in the endomysium**

