

Histology Team 431



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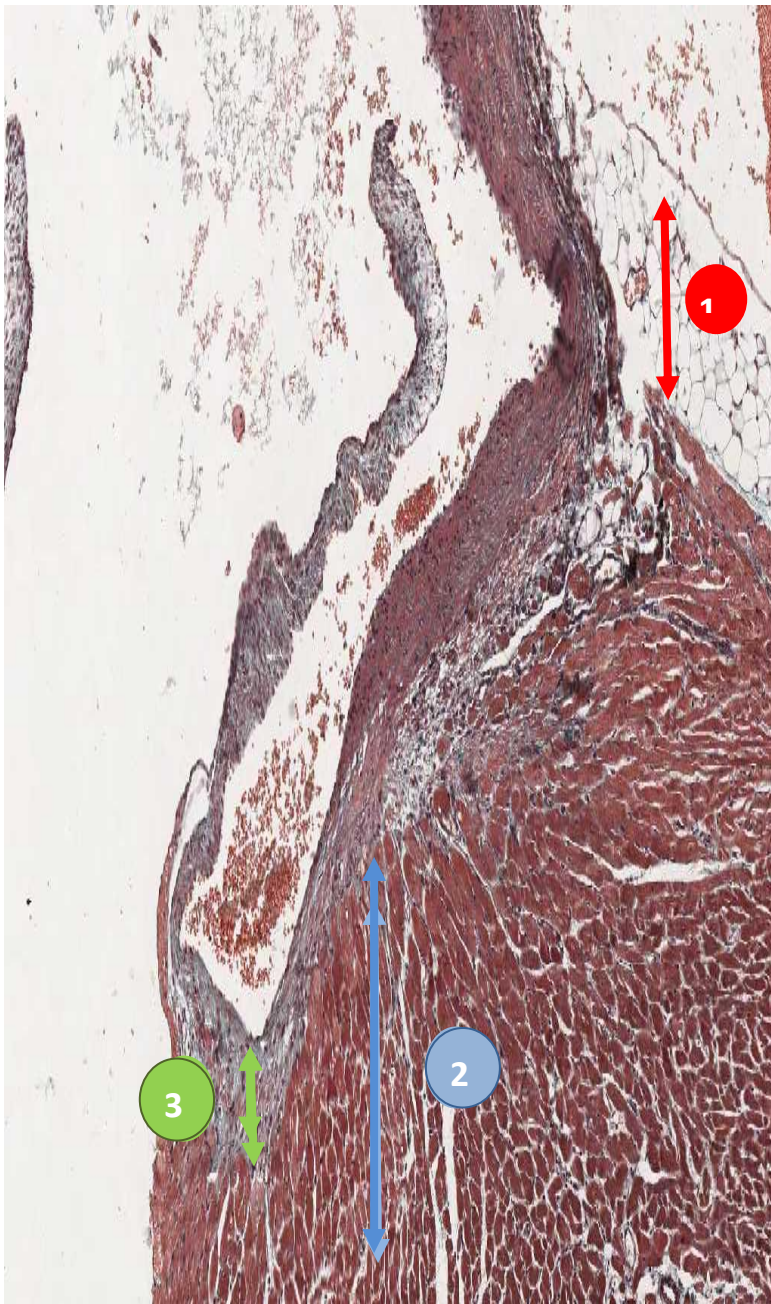
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A. Wall of the heart (important) from outside in:



1- Epicardium

- **C.T. layer (Looks like fat on the slide):** Loose C.T. contains the coronary vessels, nerves, ganglia & fat cells.
- **Mesothelium:** simple squamous epithelium.

2 - Myocardium

- It is the **middle** layer
- It is the **thickest** layer
- It contains cardiac muscle cells with **endomysium** (loose C.T.)

3 – Endocardium

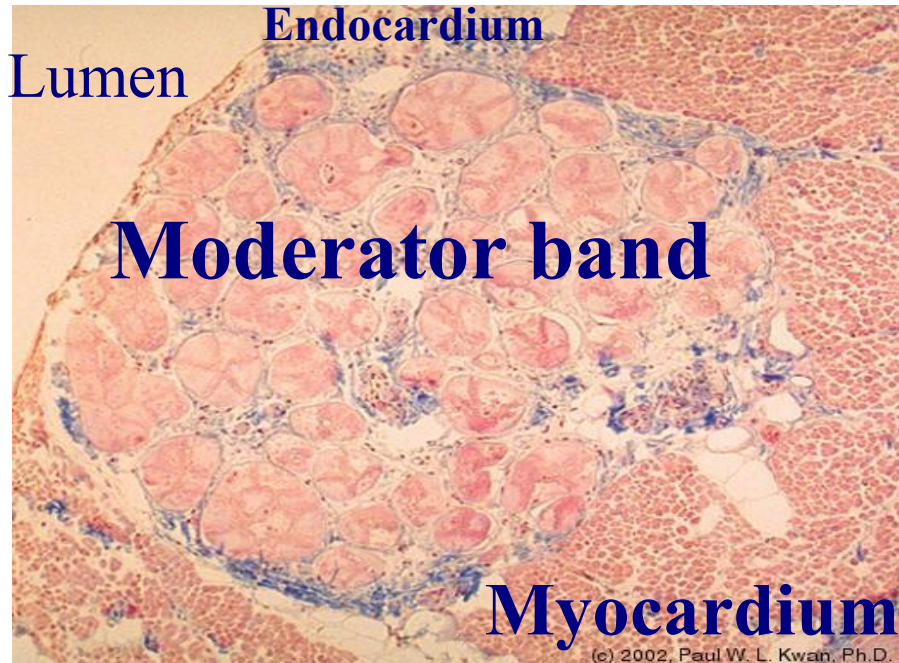
(inside out):

1- **Endothelium:** simple squamous epithelium.

2- **Subendothelial C.T.**

3- **Dense collagenous C.T. layer**

4- **Subendocardial layer:** Loose C.T. layer that contains Purkinje fibers, small blood vessels & nerves to supply the second layer (the myocardium). It seems fused with the endomysium of the cardiac muscle since it is next to it.



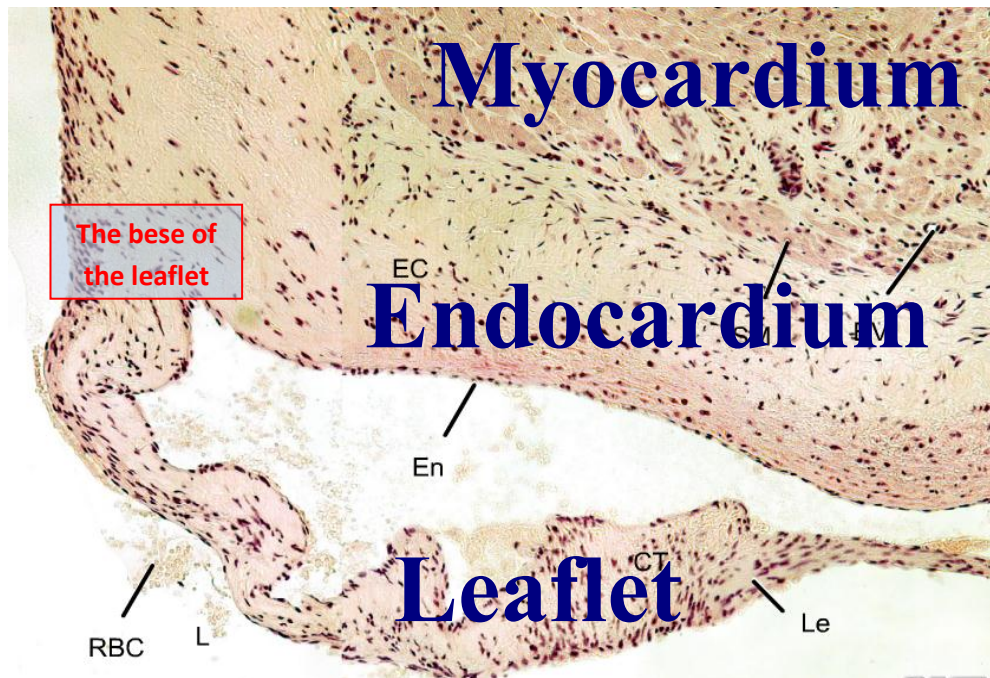
Extra information:

Moderator band: is a modified muscular band of heart tissue found in the right ventricle which carries impulses rapidly.

Purkinje fibers: are specialized muscle fibers located inside the walls of the ventricles found in the heart. Their function is to relay impulses from the bundle to the ventricles, causing almost an instantaneous contraction.

**** Moderator band contains Purkinje fibers**

B. Cardiac valves: (important)



- Each leaflet (cusp) contains **AVASCULAR core of dense irregular C.T** covered by **Endocardium.**
- Blood capillaries can be found **only** in the **base of the leaflet.**