



Lecture title: Cardiovascular System / The structures present in the Hearts' Chambers.

Lecturer Affiliation: *Dr. Saffanah Khuder Mahmood, BVMS, MSc, PhD Scientific degree (Assistant Prof. Dr.), Department of Anatomy, College of Veterinary Medicine, University of Mosul, Mosul, Iraq*

<https://orcid.org/0000-0003-0687-7762>

https://www.researchgate.net/profile/Saffanah_Mahmood3

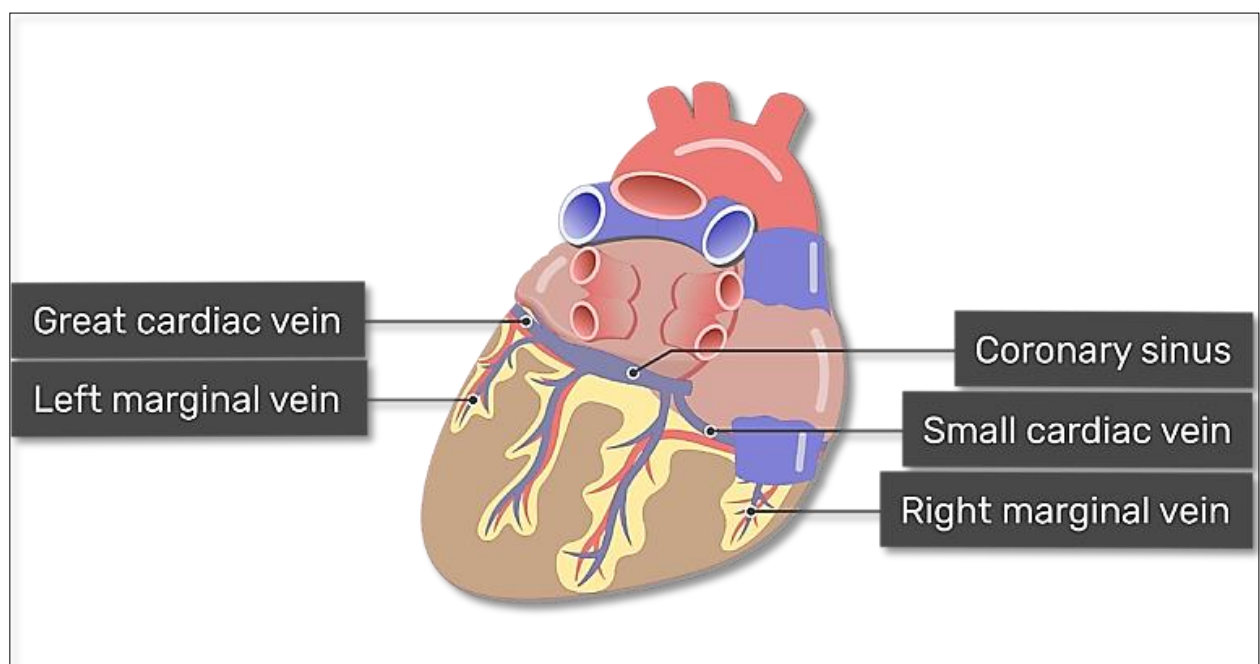
Moderator band

Also known as septomarginal trabecula. It is a band derived from the muscle band of the interventricular septum, begins below the septal end and runs toward wall of **the right ventricle**. It is found in human and animals, and well-marked in sheep and some other animals. **The function of the moderator band** is to prevent over distention and dilatation of the right ventricle during diastole and so has been named the moderator band.



The coronary sinus

It is a collection of smaller veins that merge together to form the sinus (or large vessel), which is located along surface between **the left ventricle and left atrium**. It is responsible for **draining most of the deoxygenated blood** leaving the myocardium.



Fossa ovalis

It is a depression in the right atrium of the heart, at the level of the interatrial septum, the wall between right and left atrium. **The fossa**



ovalis is the remnant of a thin fibrous sheet that covered the foramen ovale during fetal development. The foramen ovale, which has a significant role in fetal circulation (allowing blood to flow from the right atrium to the left atrium during fetal development).

Sinus Venarum

It is a sinus of venae cavae which represented by the large quadrangular cavity placed between the two venae cavae. Its walls, which are extremely thin, are connected **below** with **the right ventricle**, and **medially** with **the left atrium**, but are free in the rest of their extent. The sinus venosus collects venous blood and delivers it to **the atrium**.

Pectineus muscles

They are like "teeth of a comb" shaped. They are parallel muscular columns that are present on the inner wall of the right and left atria. The right atrium has thick pectinate muscles while these are few smooth and thinner in the left atrium.



Papillary muscles

They are muscles located in the ventricles of the heart. They attach to the cusps of the atrioventricular valves (also known as the mitral and tricuspid valves) via the chordae tendineae and contract to prevent inversion or prolapse of these valves on systole (or ventricular contraction).

Chordae tendineae (tendinous cords)

They are a group of tough, tendinous strands in the heart. They are commonly referred to as the “heart strings” since they resemble small pieces of string. Functionally, the chordae tendineae connect the papillary muscles to the tricuspid valve and the mitral valve in the heart and play a vital role in holding the atrioventricular valves in place while the heart is pumping blood.

