

Physiology and function

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Physiology and Function Physiology and Function Aorta Commonly referred as the largest artery since it can reach 70cm in length and 3.5cm in diameter, the aorta is divided into six segments (Pahlm & Wagner, 2011). Arising from the heart, the aorta forms an arch, descends towards the posterior end of the body, and terminates as it splits into two arteries. Hence, this helps it in the function of distributing blood, which is rich in oxygen, to all arteries (Pahlm & Wagner, 2011).

Atria

The cardiovascular system of a human being contains the left and the right atrium, which serve as a chamber or space for blood that is entering into the left or the right ventricles. In this regard, the atria facilitate the circulation by fundamentally allowing continuous venous flow to the heart during pulsation (Anderson, 1993).

Endocardium

The Endocardium is the innermost layer of tissues that line the heart's atrial and ventricular chambers. Since it underlies the muscular tissues that control the contraction of the heart, the endocardium provides feedback control to the heart through its interaction with the coalescing blood (Brutsaert, 1989).

Pulmonary Arteries

The pulmonary artery, which is located directly beneath the aorta, carries blood to the lungs from the right ventricle. It is important to point out that, this is the only artery that carries deoxygenated blood. In this regard, the artery carries the blood to the lungs for oxygenation in order to support the cardiovascular system (Halpern, 2011).

Ventricles

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The heart is divided into four chambers with the two lower chambers being the right and left ventricles. On one hand, the right ventricle is responsible for receiving blood and pumping it into the pulmonary artery where blood that is poor in oxygen is oxygenated and returns to the heart via pulmonary veins. Conversely, the left ventricle pumps blood to the aorta after obtaining it from the left atrium, which distributes blood to the rest of the body (Anderson, 1993).

References

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