Anatomy the heart

Health & Medicine



Anatomy/the heart

Heart Heart The heart has four chambers, two superior atria and two inferior ventricles. The atria are the receiving chambers and the ventricles are the discharging chambers. The right atrium receives blood from the veins and pumps it to the right ventricle. The right ventricle receives blood from the right atrium and pumps it to the lungs, where it is loaded with oxygen (Hall, 2011). The left atrium receives oxygenated blood from the lungs and pumps it to the left ventricle. The left ventricle (the strongest chamber) pumps oxygen-rich blood to the rest of the body.

The pathway of the blood consists of a pulmonary circuit and a systemic circuit which function simultaneously (Pocock et al., 2013). The pulmonary circulation transports deoxygenated blood from the body via the vena cava into the right atrium, which pumps it through the tricuspid valve into the right ventricle, whose subsequent contraction forces it out through the pulmonary valve into the pulmonary arteries leading to the lungs. Blood at the arterial end of a capillary is under high pressure that allows water and salts enter the tissue fluid. Blood pressure is much reduced at the venous end of the capillaries, and the reverse process takes place: water, salts, and waste products flow back into the capillary (Burns, 2013). Oxygenated blood returns from the lungs through the pulmonary veins into the left atrium, which pumps it through the mitral valve into the left ventricle, whose subsequent strong contraction forces it out through the aortic valve to the aorta leading to the systemic circulation.

Reference

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Hall, J. E. (2011). Pocket Companion to Guyton & Hall Textbook of Medical Physiology. Elsevier Health Sciences.

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