



The Viability of Simulation of Segmental Artery Clamping

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DESCRIPTION

Arteries are part of the circulatory system. They carry oxygen-rich blood after it has been pumped out of the heart. The coronary arteries also help the heart pump blood by sending oxygen-rich blood through the heart, which makes muscles work. Arteries carry oxygen-rich blood from the heart to the tissues, except for the pulmonary arteries, which carry blood to the lungs for oxygenation. There are two types of uncommon arteries. It is unique in that its blood is not "oxygenated" because it has not yet passed through the lungs. Another unique artery is the umbilical artery, which carries deoxygenated blood from the fetus to the mother. The blood pressure in the arteries is higher than in other parts of the circulatory system. The pressure in the arteries changes during the cardiac cycle. It is highest when the heart contracts and lowest when the heart relaxes. Changes in pressure cause a pulse that can be felt at different parts of the body, for example Radial Pulse B. The arterioles have the greatest collective effect on local blood flow and total blood pressure. They are the most important "adjustable nozzles" of the circulatory system with the greatest pressure drop. The combination of cardiac output and systemic vascular resistance, which refers to the collective resistance of all arterioles in the body, is the most important determinant of blood pressure at any given time. Arteries have the highest pressure and the narrowest lumen diameter. It consists of three shells: Medial shell, inner and outer membrane. The narrowing of the arteries can be caused by a process called atherosclerosis or atherosclerosis. It happens when atherosclerotic plaque builds up in the artery walls over time. Ischemic heart disease or ischemic heart disease is terms used to describe the narrowing of the coronary arteries. As the disease progresses, the build-up of atherosclerotic plaque can partially

block the blood supply to the heart muscle. Without an adequate blood supply, the heart cannot function properly, especially under stress. Stable angina is chest pain on exertion that is relieved by rest. Unstable angina is chest pain that may occur at rest and is more intense and/or persistent than stable angina. The arteries getting further thinner are what cause this. An atherosclerotic plaque ruptures suddenly, a blood clot forms, blocks the arteries that provide blood to the heart, and causes tissue death. This is what causes a heart attack. Coronary artery disease can potentially result in heart failure or arrhythmias. Chronic oxygen deprivation caused by reduced blood flow gradually weakens the heart and leads to heart failure. Arrhythmias happen when there is a disruption in the electrical impulse of the heart. Coronary arteries can narrow as a result of a variety of stressors, mostly chemical ones. We refer to this as the coronary reflex. 80% of patients secrete RCA. From the right ventricle of the heart to the pulmonary microcirculation, systemic venous blood travels through the pulmonary arteries. As venous blood returning to the heart, the blood delivered by the pulmonary arteries is deoxygenated, in contrast to other organs where arteries carry oxygenated blood. The main pulmonary arteries leave the right side of the heart and divide into smaller arteries, which eventually become arterioles and narrow into the capillary microcirculation of the lungs, where gas exchange takes place.

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CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

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