

Editorial Note on Myocardial Biology and Heart Failure

Duraisamy Balaguru

Division of Pediatric Cardiology, UT Houston School of Medicine, USA

Editorial

Cardiovascular disease (CVD) is the name for the group of disorders of heart and blood vessels, and include: hypertension (high blood pressure) coronary heart disease (heart attack) cerebrovascular disease (stroke). Atherosclerosis is a condition that develops when a substance called plaque builds up in the walls of the arteries. This buildup narrows the arteries, making it harder for blood to flow through. If a blood clot forms, it can block the blood flow. This can cause a heart attack or stroke. Coronary Heart Disease (CHD) is the most common form of heart disease. It occurs when the arteries supplying blood to the heart narrow or harden from the build-up of plaque. Plaque is made up of fat, cholesterol and other substances found in the blood. This plaque build-up is also known as atherosclerosis.

General Warning Signs and Symptoms:

- Extreme fatigue.
- Constant dizziness or lightheadedness.
- A fast heart rate (more than 100 beats per minute)
- A new, irregular heartbeat.
- Chest pain or discomfort during activity that goes away with rest.
- Difficulty breathing during regular activities and rest.

The human heart is only the size of a fist, but it is the strongest muscle in the human body. The heart starts to beat in the uterus long before birth, usually by 21 to 28 days after conception. The average heart beats about 100 000 times daily or about two and a half billion times over a 70 year lifetime. With every heartbeat, the heart pumps blood around the body. It beats approximately 70 times a minute, although this rate can double during exercise or at times of extreme emotion. Coronary artery disease (CAD), the most common heart disease, occurs

when LDL, or "bad" cholesterol, builds up plaque in your heart's arteries. In early stages, CAD has no symptoms. When plaque gets large enough to block your blood flow, you may feel symptoms like chest pain, shortness of breath, and fatigue. The blockage of the blood supply to the heart muscle that occurs with coronary artery disease leads the heart to "cry out in pain" when it is asked to work harder. However, that pain is not always felt in the

chest. Sometimes it is felt in the shoulders, arms, back, jaw, or abdomen. An echocardiogram is a common test. It gives a picture of your heart using ultrasound. It uses a probe either on your chest or sometimes can be done down your oesophagus (throat). It helps your doctor check if there are any problems with your heart's valves and chambers, and see how strongly your heart pumps blood. Tests to diagnose a heart attack include: Electrocardiogram (ECG). This first test done to diagnose a heart attack records electrical signals as they travel through your heart. Sticky patches (electrodes) are attached to your chest and limbs.

How to cite this article: Balaguru Duraisamy. "Editorial Note on Myocardial Biology and Heart Failure". J Cardiovasc Dis Diagn 9 (2021) doi: 10.37421/jcdd.2020.9.439

***Address for Correspondence:** Duraisamy Balaguru, Associate Professor, Division of Pediatric Cardiology, UT Houston School of Medicine, USA, Tel: +7135007685; E-mail: duraisamy.balaguru@uth.tmc.edu

Received: 04 February, 2021; **Accepted:** 18 February, 2021; **Published:** 25 February, 2021

Copyright: © 2020 Balaguru D. This is an open-access article distributed under the terms of the creative commons attribution license, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

