



**Towson University ♥ St. Joseph Medical Center
Wellness Center**

SILENT ISCHEMIA AND ISCHEMIC HEART DISEASE

What is ischemia?

Ischemia (is-KE'me-ah) is a condition in which the blood flow (and thus oxygen) is restricted to a part of the body. Cardiac ischemia is the name for lack of blood flow and oxygen to the heart muscle.

What is ischemic heart disease?

It's the term given to heart problems caused by narrowed heart arteries. When arteries are narrowed, less blood and oxygen reaches the heart muscle. This is also called coronary artery disease and coronary heart disease. This can ultimately lead to heart attack.

Ischemia often causes chest pain or discomfort known as angina pectoris (AN'jih-nah or an-JI'nah PEK'tor-is).

What is acute coronary syndrome?

This is an umbrella term used to cover any group of clinical symptoms compatible with acute myocardial ischemia. Acute myocardial ischemia is chest pain due to insufficient blood supply to the heart muscle that results from coronary artery disease (also called coronary heart disease).

Patients who have symptoms of acute myocardial ischemia and are given an electrocardiogram (ECG or EKG) may or may not have an ST elevation. (An ECG provides a graph of the heartbeat. Portions of the graph are labeled P, Q, R, S and T. An ST elevation describes a rise in a particular portion of this graph.) Most patients who have ST-segment elevation will ultimately develop a Q-wave acute myocardial infarction (heart attack). (The Q-wave describes another part of an ECG graph.) Patients who have ischemic discomfort without an ST-segment elevation are having either unstable angina, or a non-ST-segment elevation myocardial infarction that usually leads to a non-Q-wave myocardial infarction.

Acute coronary syndrome thus covers the spectrum of clinical conditions ranging from unstable angina to non-Q-wave myocardial infarction and Q-wave myocardial infarction. These life-threatening disorders are a major cause of emergency medical care and hospitalization in the United States. Coronary heart disease is the leading cause of death in the United States. Unstable angina and non-ST-segment elevation myocardial infarction are very common manifestations of this disease.

What is silent ischemia?

As many as 3 to 4 million Americans may have ischemic episodes without knowing it. These people have ischemia without pain -- silent ischemia. They may have a heart attack with no prior warning. People with angina also may have undiagnosed episodes of silent ischemia. An exercise test or a 24-hour portable monitor of the electrocardiogram (e-lek"tro-KAR'de-o-gram) (Holter monitor) are two tests often used to diagnose this problem. Other tests also may be used.