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Angina: When the Heart Gasps for Air

By Dr. Francisco Gamez
Health Focus Contributor

Heart attack is the leading killer of American adults, and chest pain is widely recognized as the most prominent symptom.

About 1.2 million Americans suffer heart attacks each year, but an even greater number—more than 6.8 million—have less catastrophic chest pain nearly every day.

“Angina pectoris,” pronounced (an-ji’na) is the medical term from the Latin for heart-related chest pain, and it’s caused by inadequate flow of oxygen-rich blood to the heart muscle. This is usually because of the buildup of fatty deposits in arteries serving the heart, creating blockages in them similar to rusty pipes. However angina can also occur because of a spasm, a brief constriction of the arteries, not a blockage, an abnormal heart rhythm, abnormal hard bowel movements, anemia or even a thyroid problem, etc.

Chest pain is characterized as **classic or typical angina**. Classic, typical angina (chest pain coming from the heart) refers to sensations in the chest as squeezing, heaviness, pressure, weight, vise-like aching, burning and tightness. It can radiate to the shoulder, neck, jaw, inner arm, upper portion of the belly and upper back that can occur without chest discomfort. Others have pain in the inner part of the left arm that travels down to the fingers. In general terms, angina is defined as a severe constrictive pain in the left chest classically lasting from a couple minutes up to 20-30 minutes.

Atypical or noncardiac pain is sharp, pricking, knife-like, pulsating, choking or on other occasions like a jolt. It involves the chest wall and is positional, tender to touch, can be underneath the breasts and it can radiate with a highly variable pattern. The onset can be random and lasts seconds, minutes, hours or even all day. The response to nitroglycerin is variable.

Atypical pain presentation of angina is more frequent in women and in older patients who often have exertional shortness of breath, weakness and sweating. Diabetic patients also may tend to have atypical angina and sometimes angina is silent.

Not all chest pain can be called angina unless it is documented medically coming from the heart.

Pain that is sharp and stabbing or lasts for only a few seconds is rarely heart related, but usually comes from bones, lungs, nerves, esophagus, stomach or muscles in the chest or back.

Chest pain lasting more than one half-hour can signal a heart attack (a complete blockage of the coronary arteries and the oxygen-rich blood needed for the heart cells to work properly). This kind of chest pain lasting more than a half-hour may, but not necessarily, result in death if not treated immediately.

A partial blockage—usually from 60-70 percent to 90 percent – will also cause the heart to scream out with pain signals, generally known as angina. These episodes usually occur during physical activity or emotional stress and can be relieved with rest or with nitroglycerin underneath the tongue.

Even when the angina disappears, you are not out of the woods since it will almost certainly return, perhaps several times a day, although not necessarily. Remember, the pain might be gone but the blockage will still be there. Persons with angina have a significantly elevated risk of suffering heart attacks or strokes (a risk double that of other persons) depending on characteristics of presentation.

Angina is not to be ignored. The first appearance of chest pain that could be heart-related—no matter how brief—is reason to see a doctor for a complete workup and diagnosis.

Chest pain (angina) heart related is almost always associated with other symptoms like shortness of breath (very frequently), lack of energy, palpitations (fluttering sensation of the chest), lightheadedness and weakness.

Stable, Unstable or Silent

Angina may be either *stable* or *unstable*. Stable angina, the most common type, is chronic and is defined as a predictable and reproducible left front chest discomfort after physical activity, emotional stress or both. Symptoms are typically worse in the cold weather or after meals and are relieved by rest or nitroglycerin. The presence of one or more obstructions in major coronary arteries is likely. The severity of the obstruction or blockage is usually greater than 70 percent.

Heart rate and blood pressure are key factors in the onset. Stable chronic angina is well known to occur during rest or at night, particularly in women.

For example, Frank, an avid gardener, knew that the pain and shortness of breath would occur after 15 to 20 minutes of digging in the garden—or sooner if he dug more strenuously. This is the classic example of stable angina since it occurs every time that Frank digs in the garden. This can also happen by shoveling snow or raking leaves.

Walking is a frequent trigger. Some individuals are affected by activity like jogging, running,

climbing stairs or even involving use of the arms such as shoveling, sweeping or raking. Anger, fear, excitement, emotions, sexual intercourse or bowel movements may also bring on angina, but, in all cases, the pain is usually relieved rather quickly with rest. Angina can also occur after eating large meals.

Unstable angina has no consistent pattern and episodes may be more frequent or longer (20 minutes or more) and occur even at rest. In terms of risk, unstable angina is closer to a heart attack and usually requires treatment in a hospital. Stay tuned for next week's issue on the management and treatment of angina.

Francisco Gamez, MD, is an Internal Medicine physician and Cardiologist at Bay Area Medical Center. For appointments, he can be reached at 715-735-8067.