



By
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During the past 25 years of practice in the field of cardiology, I have come across people with chest pain, ranging in age from 12 to over 100. The etiology and the management varies immensely based on age, sex, underlying physical or emotional factors, and family history, among many other factors.

Coronary artery disease is the most common cause of chest pain in adults over 40 years of age, and constitutes majority of the patients we see in our daily practice.

School Children

Frequently, we get calls to see school children, as young as twelve year olds, who experience chest pain, especially with exertion. Most parents are worried about heart disease. We have all heard about young athletes dying on the basket ball courts. Most of the time the chest pain may not be related to an organic heart disease. The child may be out of shape or may be exerting beyond his or her capacity which can cause chest pain in most people. It is not uncommon for children after a bout of cold, congestion and persistent cough to experience chest pain from sore rib-muscles. Most of the time the chest pain is benign and self limiting. If the pain persists, consult with your physician. If your physician detects any abnormalities in the rhythm, heart sounds or murmurs, then consult with

a pediatric cardiologist and a 2D echocardiogram can be helpful in excluding any significant heart disease.

Young adults

Young adults between the ages of twenty and thirty-five also present with chest pains due to a variety of causes. Let us take a look at some common problems that we seen in our daily practice.

Pleurisy

Occasionally, young adults can develop pleurisy or inflammation of the lining that covers the lungs that can cause pain which varies with respiration and is exacerbated by deep breathing. It usually occurs in association with a viral syndrome and last for a few days. It responds very well to anti-inflammatory agents such as Motrin or Indocin.

Pericarditis

A similar inflammatory process can involve the pericardium that covers the heart muscle, resulting in pericarditis which can cause chest pain. The pericarditis pain intensifies with deep breathing and is associated with changes characteristic EKG changes.

Hypertrophic cardiomyopathy

This is a rare condition where there is increased thickness of the left ventricular wall, especially the septum that separates the right and the left ventricles. It causes chest pain on exertion, shortness of breath, irregular heart rhythms, and in rare cases sudden death. An EKG may show increased voltage due the thick heart muscle. The 2D echocardiogram is a

painless noninvasive study, which within minutes can enable us to diagnose the presence or absence of hypertrophic cardiomyopathy. Any student engaging in vigorous activities such as basket ball, football, or other athletics, would definitely benefit from getting a 2D echocardiogram, especially if the person has experienced chest pain during activities.

Mitral valve prolapse

This is a fairly benign condition where there is prolapse of the mitral valve into the left atrium during the left ventricular contraction. It is seen in as many as 5% to 10% of the young adults, especially females.

It is associated with chest pains, shortness of breath, weakness, dizziness, palpitations, and tiredness among others. It can easily be diagnosed with a 2D echocardiogram. The symptoms may come and go.

The symptoms usually respond to a small dose of Beta Blockers. Some people may have a tendency to stop the medicine. However, if the symptoms recur on a regular basis, it is advisable to stay on the medicine which is relatively harmless.

In 2% to 3% of the people with this condition could lead to mitral valve leak that can progress. Occasionally some people severe mitral valve leak may need mitral valve repair or replacement.

As this valve is prone for possible infection, we routinely advise people with mitral valve leak to get antibiotic prophylaxis before dental work or surgery. An exercise test will also help us in excluding coronary artery disease and in determining your exercise capacity, if there is a valve leak. Yearly echocardiograms are recommended to

evaluate the valve function and to determine if the leak is getting worse.

Syndrome X

Some young ladies in their thirties and forties may experience chest pain. Their complete cardiovascular examination including nuclear stress test and cardiac catheterization may fail to reveal significant coronary artery disease. These people do have increased risk of cardiovascular event in the future and they must be treated aggressively as though they had heart problem and encourage them to lose weight. They should also be treated with medicines for blood pressure, cholesterol, and encouraged to exercise.

Conditions mimicking chest pain from heart disease

A number of conditions also can cause chest pain that can mimic heart diseases. However, it is impossible, based on the history alone, to differentiate chest pain arising from other causes from those arising from a real heart problem. Careful examination, EKG, 2D echocardiogram and a stress test can help us differentiate the conditions.

Acid reflux

It is a common problem that can lead to heart burn which can mimic heart pains. Most people would seek comfort thinking that the pain is due to acid reflux and get used to routine antacid use. If you are having any discomfort in your chest, it is advisable to get a complete cardiovascular evaluation including an EKG, echocardiogram, a stress test if indicated. Long term use of antacids is not a solution even if you are having an acid reflux. You may

want to consult with a gastroenterologist if you symptoms that last more than 6 to 8 weeks despite being treated with antacids.

Gall stone symptoms

Gall bladder symptoms can mimic coronary artery disease symptoms. We have seen people being admitted to the hospital with what appeared to be a gall bladder attack in a young person in the thirties to realize that it was actually a heart attack. Getting an electrocardiogram in all young people would help to rule out any significant acute cardiac events.

Anxiety

Anxiety can just about mimic any heart disease symptoms or for that matter can mimic any type of symptoms. We have seen people experience chest pains, when one the family members is diagnosed to have heart disease or suffer from a heart attack. It is normal to feel chest pain during period of anxiety and the anxiety itself makes the symptoms worse. The more you worry about it, the more intense the symptoms become. After thorough cardiovascular evaluation, if there is no evidence for a serious heart disease, your physician may prescribe a short course of tranquilizers to help you get over the acute anxiety situation.

visit www.sugarlandheartcenter.com for a more comprehensive information on heart diseases.”

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