Heart Murmurr Essay, Research Paper

Heart Murmur, Atherosclerosis, & Heart Failure

A heart murmur is a sound caused by blood flowing through a child’s heart or through blood vessels entering or leaving the heart. More that 50 percent of all people will be diagnosed with a heart murmur sometime in their lives. When a child’s doctor or nurse practitioner detects a heart murmur, this causes many parents quite a bit of anxiety, especially if they have relatives with heart disease. Luckily, in most children a heart murmur does not mean that there is something wrong with the heart. In fact, only one in 100 children who have a heart murmur will actually have heart disease. Murmurs that are not associated with heart disease are referred to as innocent murmurs. Most children diagnosed with a heart murmur have innocent murmurs. There are several different types of innocent murmurs. In the newborn and infancy period, a common innocent murmur heard is called pulmonary flow murmur. This is caused by the flow of blood through the pulmonary artery, which takes blood to the lungs. The arteries are still slightly narrow, and, therefore, blood flow through them will cause a murmur. As the baby grows, the murmur will become softer and many times disappear altogether. Another common innocent murmur heard in children ages 3 to 8 years is a vibratory musical murmur called a Still’s murmur. No one knows the cause of the murmur other than blood flowing through a healthy vigorous heart. The murmur is usually detected at a well-child visit or if the child comes in with fever or some other form of illness. In times of fever or illness, the murmur will be louder because the heart is pumping harder, and blood is flowing through the heart faster. The murmur tends to become softer as the child grows, and his or her chest becomes thicker with muscles. Again the murmur is a normal, innocent murmur of childhood. A third common innocent murmur that occurs during the teen-age years is a pulmonary flow murmur. This murmur is due to blood flow in a normal heart and pulmonary artery. The murmur is louder with fever or illness; it is not due to a heart problem. When a child’s physician or nurse practitioner hears a murmur, he or she will check on how the child is growing, playing, feeding or breathing. Your child’s physician or nurse practitioner may order special tests such as an EKG echocardiogram to help them decide if the murmur is innocent. They may ask that your child see a pediatric cardiologist – one who specializes in helping children that may have a heart problem. The pediatric cardiologist can also help decide if the murmur is innocent. As long as everything is normal with the child, there is no need to worry about the murmur. The thing to remember is that an innocent murmur is common in children. An innocent murmur is not due to heart disease, and an innocent murmur may be present throughout the child’s life. An innocent murmur will cause no problems for the child, and he or she will not be restricted from any activity. The child will not have to take medicine for the innocent murmur.

The most common form of heart disease is Atherosclerosis, also known as coronary heart disease or hardening of the arteries. It involves deposits of fatty substances, cholesterol, cellular waste products, calcium and fibrin (a clotting material in the blood) in the inner lining of an artery. The build-up that results, called plaque, may partially or totally block the blood’s flow through the artery. This can lead to bleeding (hemorrhage) into the plaque or formation of a blood clot (thrombus) on the plaque’s surface. If either of these occurs and blocks the entire artery, a heart attack or stroke (brain attack) may result.

Atherosclerosis affects large and medium-sized arteries. The type of artery and where the plaque develops varies with each person. Atherosclerosis is a slow, progressive disease that may start in childhood. In some people, this disease progresses rapidly in their third decade–in others it doesn’t become threatening until they’re in their fifties or sixties.

Exactly how Atherosclerosis begins or what causes it isn’t known, but some theories have been proposed. Many scientists think Atherosclerosis begins because the innermost layer of the artery, called the endothelium, becomes damaged. Possible causes of damage to the arterial wall are elevated levels of cholesterol and triglyceride in the blood, high blood pressure and cigarette smoke.

Heart failure is the most common reason for hospitalization in the United States today. Population-based studies estimate that heart failure affects over three million Americans; more than 400,000 new cases are diagnosed annually. Sometimes the cause stems from a virus which attacks the heart muscle, sometimes as an aftermath of a heart attack. Other times, the cause of heart failure is not clear. At Newark Beth Israel Medical Center, we offer a broad range of traditional therapies as well as options not available elsewhere in New Jersey.

In working with referring physicians and individuals to successfully manage heart failure, the physician directors of our Heart Failure Program rely on traditional medical therapy for some patients. A significant number of individuals respond favorably to these medications and are able to successfully maintain the regimen throughout their lives.