

## Vascular Health and Atherosclerosis Transcript

**ANNOUNCER:** Vascular health refers to the well-being of the heart and the blood vessels, also called the cardiovascular system. As part of this system, the heart pumps blood through the arteries to all parts of the body. Arteries can become diseased through a process called atherosclerosis.

**ADOLPH M. HUTTER, Jr., MD:** Atherosclerotic plaques: they're made of cholesterol and calcium and some other things too. But they can plug up the arteries. So they can plug up the arteries in the legs; they can plug up the arteries in the neck that go to the brain; they can plug up the arteries in the heart and the coronaries that supply blood to the heart. When the atherosclerotic plaques build up, they can cause obstruction to blood flow, and so that as they get narrower and narrower, less and less blood gets through. And then occasionally the plaques can rupture, and when they rupture they release some compounds that cause a blood clot. And so you get a blood clot in the artery that occludes the artery, so no blood gets through. And this is what can lead to a stroke or a heart attack.

**MARY ANN McLAUGHLIN, MD:** Because atherosclerosis is a disease of all the blood vessels, once the blockages are found in part of the body, they're likely to be found somewhere else. So it's not uncommon that we see a patient who has a blocked artery in heart go on to get a blocked artery in the brain and a blocked artery in the leg. The whole blood vessel system, vascular system is affected.

**ANNOUNCER:** The process of atherosclerosis can begin early in life.

**ANTONIO GOTTO, MD:** By the time a young person, particularly males in our society, are in their mid-twenties or thirties, they have begun developing plaque, or buildup in the blood vessels, in the arteries. There were autopsies carried out on young soldiers who were killed in Korea and in Vietnam, and showed that already there was plaque beginning to develop. So this process generally builds up or occurs over a period of time.

**ANNOUNCER:** Certain risk factors increase the likelihood that plaques will develop, putting people more at risk for heart disease, stroke and other problems, such as peripheral vascular disease.

**ANTONIO GOTTO, MD:** There's a gender factor, there's an age factor, and then there's a blood factor, the high level of cholesterol in the blood. Also, blood pressure, which puts an extra strain on the blood vessels not only for heart attacks, but it's a major risk factor for strokes. And then there's cigarette smoking. And then we have another one, which is diabetes, which is becoming more common as our population gets older and gets more overweight. And diabetes also is a major risk factor for heart attacks and strokes.

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**ANNOUNCER:** The good news is that through treatment atherosclerosis can be slowed down. Drug therapies may help stop or even reverse the progression of vascular disease.

**MARY ANN McLAUGHLIN, MD:** We have a greater chance of having an effect on reversing blockages if we can find them at an earlier stage. If there are diffuse blockages or lots of disease, we can try to prevent further obstruction, and we do have medications now that can stabilize the plaque.

**ANNOUNCER:** Talk to your doctor about determining your risk factors and assessing your vascular health. Early detection is the key to a healthier life.