Patient Information Sheet

Lipoprotein (a) – A Hidden Risk Factor for Heart Disease and Stroke

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What is Lipoprotein (a)?

Lipoproteins are tiny particles that circulate in the blood. They contain cholesterol, fat, and protein in varying amounts depending on the body's need. Abnormalities in the amounts or kinds of lipoproteins in the blood can cause increased risk of atherosclerosis. Atherosclerosis is sometimes referred to as hardening or narrowing of the arteries. These changes in the arteries lead to heart attack, angina, and stroke. Lipoprotein (a) is a lipoprotein molecule similar to low density lipoprotein (LDL) cholesterol. Both lipoprotein (a) and LDL are rich in cholesterol and contribute to atherosclerosis of the blood vessels.

What are the signs and symptoms of elevated lipoprotein (a)?

There are no specific signs or symptoms of elevated lipoprotein (a). Special blood tests must be done to determine lipoprotein (a) levels.

What causes elevated lipoprotein (a)?

Lipoprotein (a) levels are largely set by a person's genes – the levels you may have typically run in your family. Although a healthy diet is important, what you eat is not thought to influence lipoprotein (a) values to any great extent.

Who typically has elevated lipoprotein (a) levels?

Lipoprotein (a) levels are higher among black people than among people of white or Asian race. Between 20-30% of people in the US have lipoprotein (a) levels high enough to raise the risk of having heart disease.

How are elevated lipoprotein (a) levels diagnosed?

Lipoprotein (a) levels are generally checked in patients with a strong family history of heart disease and in patients whose cholesterol levels indicate a high lipoprotein (a) level may be present. Blood is drawn and sent to special labs which are able to measure the amount of lipoprotein (a) present in the blood.

What are the treatments available to lower elevated lipoprotein (a) levels?

High lipoprotein (a) levels are currently hard to treat. Changes in a person's diet have little effect on levels and few cholesterol lowering drugs are good at bringing levels down. They can be treated somewhat by giving niacin or fibrate drugs (gemfibrozil or fenofibrate). They can also be treated by giving estrogen (female hormones) to women after menopause. When a high lipoprotein (a) level is discovered in a patient, attention to other, more treatable heart disease risk factors should be increased. Examples of such risk factors are having a high LDL, smoking, and lack of exercise. All of the risk factors interact to produce heart disease. Once therapy is begun to lower levels, therapy generally must be continued for the rest of a person's life.

What are some side effects associated with treatments for elevated lipoprotein (a)?

Postmenopausal women taking hormone replacement therapy may notice some bloating or loss of appetite. The main side effects of niacin are flushing and headaches. Upset stomach is the main side effect of fibrate drugs. As with any drugs, contact your doctor or pharmacist with questions or concerns.

Where can I find additional information on lipoprotein (a) and other cholesterol topics?

Information can be found through the following organizations –

?? National Cholesterol Education Program
?? American Heart Association
?? American College of Cardiology
?? Preventive Cardiovascular Nurses Association