Capitolo C2

Biology in English

PUBLIC HEALTH ENEMY NUMBER ONE



Gardiovascular diseases are the number one cause of death globally. They are a group of disorders of the heart and blood vessels and include:

- coronary heart disease, disease of the blood vessels supplying the heart muscle;
- cerebrovascular disease, disease of the blood vessels supplying the brain;
- peripheral arterial disease, disease of blood vessels supplying the arms and legs;
- rheumatic heart disease, damage to the heart muscle and heart valves



A One of the first symptoms of an heart attack is arm pain.

Curtis, Barnes, Schnek, Flores INVITO ALLA BIOLOGIA.BLU © Zanichelli 2012

from rheumatic fever, caused by streptococcal bacteria;

- congenital heart disease, malformations of heart structure existing at birth;
- deep vein thrombosis and pulmonary embolism, blood clots in the leg veins, which can dislodge and move to the heart and lungs.

Heart attacks and strokes are usually acute events and are mainly caused by a blockage that prevents blood from flowing to the heart or brain. The most common reason for this is a build-up of fatty deposits on the inner walls of the blood vessels that supply the heart or brain. Strokes can also be caused by bleeding from a blood vessel in the brain or from blood clots.

The most important behavioral risk factors of heart disease and stroke are unhealthy diet, physical inactivity and tobacco use. Behavioral risk factors are responsible for about 80% of coronary heart disease and cerebrovascular disease.

The effects of unhealthy diet and physical inactivity may show up in individuals as raised blood pressure, raised blood glucose, raised blood lipids, and overweight and obesity.

There are also a number of «causes of the causes». These are a reflection of the major forces driving social, economic and cultural change (globalization, urbanization, and population ageing) besides poverty and stress.

Often, there are no symptoms of the underlying disease of the blood vessels. A heart attack or stroke may be the first warning of underlying disease. Symptoms of a heart attack (figure **A**) include pain or discomfort in the centre of the chest and pain or discomfort in the arms, the left shoulder, elbows, jaw, or back. The most common symptom of a stroke is sudden weakness of the face, arm, or leg, most often on one side of the body. People experiencing these symptoms should seek medical care immediately.

Heart disease and stroke can be prevented through healthy diet, namely rich in fruit and vegetables and avoiding foods that are high in fat, sugar and salt, regular physical activity and avoiding tobacco smoke.

[Adapted from «Cardiovascular diseases (CVDs)», Fact sheet no. 317 (January 2011) © World Health Organization.]

Answer the following questions.

A) Which are the main causes of heart attacks and strokes?B) What are the behavioral risk factors for cardiovascular diseases?