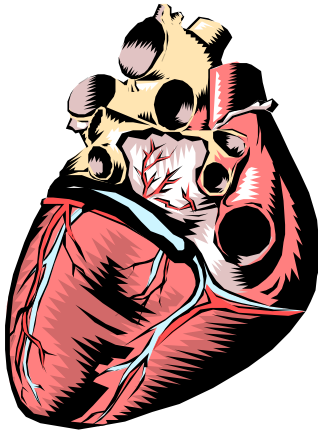


Cardiovascular Disease

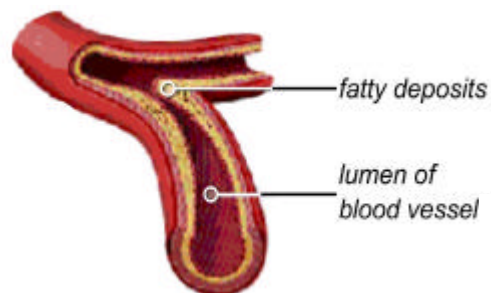


Cardiovascular disease, principally coronary heart disease and stroke, is the number two killer in Hong Kong and accounts for 15.5% of all deaths. It is the top killer for both men and women among all racial and ethnic groups in the United States. Coronary heart disease is by far the largest cause of premature deaths in developed countries and responsible for much ill health and disability.

What is Cardiovascular Disease?

Cardiovascular disease is a general term that covers many common conditions affecting the heart and blood vessels. It occurs when the system of the heart and blood vessels is unable to keep up with the demands of the rest of the body. There are many different types of cardiovascular disease: coronary heart disease, hypertension, heart failure and stroke.

Coronary heart disease is a disorder of the coronary arteries that lie on the surface of the heart and carry blood to the heart muscle. It starts with the build up of fatty deposits on the inside of the coronary vessels. This reduces the diameter of the vessels, and therefore the flow of blood in the heart muscle. If the oxygen supply to the heart muscle is reduced, a heart attack results. If it is less serious, recovery is possible; however if a large part of the heart is affected, this can cause instant death.



Risk Factors

There are various causes and different forms of cardiovascular disease. The chance of developing the disease is increased by certain risk factors. Some risk factors relating to cardiovascular disease include:

- Age – risk increases with age, about 80% of people who die of coronary heart disease are 65 or older.
- High levels of cholesterol in the blood – there is a direct relationship between blood cholesterol concentration and the risk of coronary heart disease; a level of above 250 mg cholesterol per 100 cm³ of blood is considered to be high.
- High blood pressure – risk increases with increasing blood pressure, which is associated with high salt intake, excessive caffeine or alcohol. The higher the blood pressure, the more work the heart has to do.
- Cigarette smoking – smokers have twice the risk for heart attack than non-smokers. The nicotine in the cigarette smoke constricts the blood vessels, thus raising the blood pressure. It also increases blood cholesterol level and raises heartbeat. Carbon monoxide in the blood reduces the oxygen carrying capacity.
- Lack of physical activity – people who are not physically active have twice the risk for heart disease than those who are active. Aerobic activity helps to strengthen the heart and maintains a healthy blood flow in the vessels.
- Obesity – people who are overweight have a higher risk for cardiovascular disease.
- Diet – risk increases with high intake of saturated fat and salt (over-processed foods). Saturated fat will raise blood cholesterol levels; high intake of fat will also cause obesity. Risk decreases with high intake of antioxidants (such as vitamins C and E, found mostly in fruit and vegetables) and soluble fibre, and moderate intake of unsaturated fats (mainly from fish and vegetables).



- Stress – raises blood pressure because hormones released causes constriction of blood vessels.
- Alcohol drinking – risk increases with high intake, blood pressure rises.
- Diabetes – an increased risk for people with diabetes.
- Rheumatic fever – a bacterial infection affecting the heart.
- Genetic inheritance – high levels of cholesterol, high blood pressure and diabetes mellitus may be inherited.

Treatment

This may include rest, drug treatment to reduce high blood pressure, valve replacement surgery, fitting an electronic pacemaker to control heart rhythm, heart transplants, and bypass operations to re-route the blood and avoid diseased blood vessels.

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