

ANGINA

What is it?

The heart is a muscle which pumps blood around the body all day long. To do this it requires a constant supply of energy and oxygen which is delivered in the blood by its own feeding arteries the **coronary arteries**. Angina is a pain or tight feeling which usually affects the centre of the chest. It may radiate to the arms, neck or occasionally the back or only be felt there. It occurs when the heart does not have enough oxygen which is more likely with exertion when the heart needs more blood. It can also be precipitated by cold wind or after eating when the blood is directed to other organs.

What causes it?

The blood supply is reduced when the arteries are narrowed by deposits in the lining of their walls. The usual cause of this blockage is **smoking, high cholesterol levels, or high blood pressure**. It also occurs in people with diabetes or a strong tendency to heart disease at an early age in their family members.

What are the risks?

The main risk is of heart attack. A heart attack occurs when one of the three coronary arteries becomes completely blocked. This leads to death of the area of the heart muscle being supplied by that artery. This produces prolonged pain and reduced function of the heart but the main danger is irregularity of heart rhythm that can occur early with a heart attack and stop the heart beating.

How do you treat it?

It is essential to **stop smoking**, it will also help to lose weight, treat high blood pressure or cholesterol and become fit. Acute attacks of angina can be controlled by nitroglycerine tablets (**anginine, isordil**), or sprays (**nitrospray**). This works to dilate the coronary arteries to improve the flow of blood. Other medications work to reduce the workload of the heart and reduce the amount of oxygen it requires. These include beta blockers (eg **betaloc, noten, tenormin**), calcium blockers (eg **verapamil, Norvasc, diltiazem**) and Nicorandil. Aspirin in low dose or Clopidogrel are very important to help keep the blood thin and prevent blockage by clotting. If you get an attack of angina you should take 1/2 a tablet of anginine or one nitro spray while seated or lying down. If the pain persists for 5 minutes take a further full tablet or spray. If the pain is still significant at 10 minutes call the ambulance service on 000.

If the blockages are producing a lot of pain or tests suggest they may be more serious, an Xray of the heart arteries will be undertaken to see if the blockages are suitable for ballooning or a bypass operation.