

Drugs treatments for heart disease aim to do one or more things:

- Improve your blood flow through your coronary arteries e.g. by dilating your arteries
- Reduce the build up of atherosclerosis.
- Help the heart muscle to work better, allowing the heart to act more efficiently as a pump.
  
- Alter the electrical control of the heart and influence its rhythm, e.g. slowing it down when it beats too fast, or preventing abnormal rhythms.
- Thinning the blood to improve flow, stop clots from forming and prevent a heart attack.
- Reduce the strain on the heart, for example by controlling blood pressure.

You will be advised by your doctor about drugs to take if you have heart disease. It is important that you are monitored - blood pressure, clotting levels and other parameters are very important when you are on dialysis. Make sure you read the instruction leaflets with your medication and discuss any side effects with your doctor.

### **Aspirin and antiplatelets**

These prevent blood clotting in the arteries by reducing the stickiness of blood cells called platelets, which are involved in clotting. This helps to improve blood flow in narrowed coronary arteries and reduces the risk of a blocked artery leading to a heart attack. Aspirin can reduce the risk of dying from a heart attack by 25 per cent or more. These drugs are also used after heart bypass surgery to prevent blood clotting. Can should be taken when on dialysis because of anticoagulant therapies - always under the care and guidance of your doctor.

### **Beta blockers**

These are used to prevent angina, treat high blood pressure and improve heart failure. They work by blocking the effects of stress hormones, which make your heart beat faster and more forcefully. By slowing the heart and also relaxing the arteries throughout the circulation, the heart doesn't have to work so hard, which helps in heart failure. Beta blockers also lower the risk of another heart attack if you have already had one, and/or help control abnormal heart rhythms (arrhythmias).

### **Calcium channel blockers**

There are different types of calcium channel blockers and they have differing effects. Some relax and dilate the blood vessels and are used for treating angina, high blood pressure and heart failure, while others slow the rate at which the heart beats and are used to treat abnormal

heart rhythms.

### **Diuretics**

These drugs, often referred to as 'water tablets', may be used to control blood pressure or remove excess fluid from the body in heart failure. They act by increasing the excretion of water and sodium by the kidneys.

### **Nitrates**

Nitrates dilate the coronary arteries. This improves blood flow to the heart muscle, which helps to relieve angina. Glyceryl trinitrate (GTN) is a commonly used nitrate. It's in the tiny pills, or spray, that people put under their tongue during an angina attack. Dilation of the arteries reduces the work the heart has to do to pump blood around the body, so nitrates are helpful in heart failure, too.

### **Statins**

These drugs are used to help reduce the amount of cholesterol in the blood. High levels of cholesterol are a risk factor for heart disease. By lowering unhealthy levels of cholesterol, the risk of CHD and heart attacks is reduced.

### **Thrombolytic drugs**

This group of drugs has radically improved the treatment of, and survival from, heart attacks in the past decade. They dissolve clots that form in a coronary artery and trigger heart attacks.

If the drugs are given quickly enough - within a couple of hours of onset of a heart attack - they'll restore the blood flow through the artery in time to avoid permanent damage to the heart muscle. The earlier this treatment's given, the better.

However, because the drug thins the blood it can cause brain haemorrhage (stroke) in a significant number of patients

