

CORONARY ARTERY BYPASS SURGERY

What is it?

Bypass surgery is required when the blood flow to the heart muscle is impaired by narrowings in the feeding arteries, the **coronary** arteries. Bypass is performed by sewing blood vessels to the coronary **arteries beyond the blockages** to restore flow to the heart muscle. In the past these blood vessels were all veins taken from the legs, but it has been found that these tend to clog up after about ten years. Modern surgery utilises arteries taken from other regions of the body. The commonest arteries used are the **mammary arteries** which lie on the inside of the chest wall. These arteries are one of many that supply the chest wall and are not missed when removed. The **radial arteries** which lies as one of two blood vessels in the forearm can also be used without compromising the blood supply to the arm. Veins from the legs are still used when there are not enough arteries to deal with all of the narrowings. Currently the operation is performed by making a cut through the breast bone in the centre of the chest. The heart has to be stopped while the sewing is done and a heart lung machine takes over its role during this period. Your recovery after surgery will be surprisingly quick and you will be able to eat breakfast the next day. The main delay in recovery after surgery is healing of the cut in the breast bone.

What are the risks?

The risks of surgery depend on the severity of your heart disease, the presence of other medical conditions such as diabetes and your age. Survival after bypass surgery is usually 99%. Additional risks are of stroke (1-2%) and infection (1-2%).

How long will I be in hospital?

You are generally admitted the day before surgery to allow the specialists to assess you and to familiarise you with the procedure. The surgery takes three to five hours and from theatre you go to the intensive care unit. You stay in intensive care for the first two post operative nights and then go to the general cardiac ward for a total stay of generally 7 - 8 days.

What treatment and follow up is required?

After bypass surgery all patients are on Aspirin to prevent the bypasses clotting. When radial artery grafts have been performed, a tablet to prevent arterial spasm is prescribed for six months (such as felodipine or amlodipine). Treatment for high blood pressure and high cholesterol levels are also important in the long term. You will need regular checks of blood pressure and cholesterol levels by your local Doctor indefinitely. Exercise tests to assess the bypasses will be done as a baseline soon after surgery and then every year or two. Your Cardiologist will continue to see you once a year.