

# Coronary angiogram

**C**oronary angiograms show the extent of narrowing of the coronary arteries, the vessels or tubes that supply blood to the heart. Coronary angiograms can also show how the heart is pumping and how well the heart valves are working.

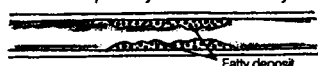
A fine needle is inserted into the femoral artery, the main artery in the groin, under local anaesthetic. Sometimes this needle may be inserted into the radial artery on the inside of your elbow or the brachial artery near your wrist. A thin catheter or tube is then passed, guided by x-ray, to each coronary artery. A special dye or contrast medium is injected into the arteries and left ventricle of the heart. As the dye moves through the heart and arteries x-ray recordings (pictures) are made.

These images or pictures provide a map of the coronary arteries that will enable the cardiologist to identify any blockages or narrowing of the coronary arteries. Sometimes the cardiologist will suggest cardiac surgery, or it might be possible to have an angioplasty and/or a coronary artery stent whilst you are having your coronary angiogram.

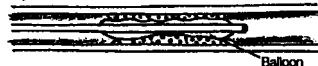
## Coronary angioplasty (PTCA)

Coronary angioplasty is often used instead of surgery to treat narrowed or blocked coronary arteries. A balloon is inflated at the site of the blockage in the coronary artery, which opens

A narrowed or partially blocked coronary artery



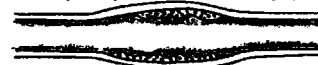
A coronary balloon dilation catheter with balloon deflated



A coronary balloon dilation catheter with balloon inflated



A coronary artery after successful angioplasty



the artery by pushing the blockage material into the artery walls.

While this is often enough to restore blood flow to the heart muscle, the coronary artery may be split or damaged, the narrowing may recur as the balloon is deflated, or the blockage may reform (restenosis) during the next few months. If this occurs or the cardiologist feels there is a risk of recurrence, a coronary stent will be inserted.

## Coronary stent

A coronary stent is a metal coil that is inserted into the diseased part of the artery with the use of a special balloon catheter. Once the diseased part of the artery is reached the balloon is inflated, which causes the stent to expand and hold the artery open. The stent remains in place when the balloon is removed.

Often more than one stent will be used on each blockage. You will then be given special tablets for several weeks to decrease the risk of blood clots forming on the stent. It will be necessary for you to take a small dose of aspirin for the rest of your life.

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