

Angiogram / Angioplasty Information

What is an Angiogram?

An angiogram is an imaging technique to visualize blood vessels. Mostly it is used to look at arteries (vessels that transport the blood away from the heart), but at times can also be used to look at veins (vessels that take blood back to the heart). It is helpful to diagnose narrowings or blockages that obstruct the blood flow. These blockages are caused by a build up of atherosclerotic plaque.

The risk factors for Atherosclerosis include:

- Smoking
- High blood pressure
- High cholesterol
- Diabetes

Once these narrowings are identified they can often be treated at the same time (with an angioplasty, which is explained below). During the angiogram first a needle and then a small, short tube (sheath) is inserted into the vessel, typically in the groin. A special dye (contrast medium) is injected into the blood stream and x-ray pictures are taken as the solution passes along the vessels. The whole procedure lasts approximately one hour, but may take longer if treatment takes place in the same sitting. One of the big advantages is that it can be performed with a local anaesthetic, which means that the patient does not need to go to sleep.

What is an Angioplasty?

An angioplasty is a minimal invasive (keyhole) technique to treat narrowings or blockages in the vessels that restrict the blood flow. This is done by passing a balloon across the diseased segment and then inflating it. The size of the balloon will match exactly the size of the blood vessel. As a result the plaque will literally be squashed against the vessel wall restoring a good lumen which allows the blood to flow unrestricted. Sometimes a 'stent' is inserted afterwards. A stent is a tube made of a special metal mesh and works like a scaffolding to assist keeping the artery open. The picture below shows a thigh artery before (left), during (middle) and after (right) an angioplasty.