Angiograms and angioplasty - What you need to know

Angiograms and Angioplasty –
Using your body’s vascular highway to identify and treat blockages
April 12, 2018 – Has the doctor prescribed an angiogram? If you are not sure what to expect, you’re not alone. Angiogram information is the number one topic that visitors to Vascular.org are seeking.

Angiograms are a common procedure and are used to diagnose many conditions. Vascular surgeons use them to find out if you have a blockage in one of your arteries.

**What does a vascular surgeon do?**

In fact, says vascular surgeon Dr. Luke K. Marone, “an angiogram is considered the gold standard for evaluating blockages in the arterial system.”

Your vascular system can be considered a kind of highway, and an angiogram takes advantage of that artery route to send tiny equipment to get a good look at a suspicious area.

**Here’s what the angiogram process may look like:**

- You likely will be sedated during the procedure, which can last anywhere from 15 minutes to several hours.
- A needle will be inserted into an artery in your groin. From this “entrance ramp,” areas all over the body can be examined and even treated.
- Very thin tubes known as catheters are inserted into the artery and threaded through the arterial system to the area under investigation.
- An iodine dye, also called a contrast agent, is injected into the area.
- With an X-ray, the surgeon watches how the blood is flowing and identifies the site of any blockage.

Depending on your symptoms and severity of any blockage, this may be the end of your procedure or the beginning of the next one. If the surgeon thinks it is necessary, she may then do an angioplasty, a process that opens up the blocked area and returns good blood flow to that part of the body.

**The angioplasty:**

- Guided by X-ray, your vascular surgeon navigates through the blockage with a wire and introduces a special device equipped with an inflatable balloon.
- After positioning the balloon device across the blocked portion of the artery, the surgeon inflates the balloon to expand the artery and compress the blockage.
- The balloon is then deflated and removed while keeping the wire in place across the area that has been treated.
- Contrast dye is injected to assess the result. Treatment is considered a success if blood flow is improved and less than 30 percent of the blockage remains.
- If the vessel is still considerably narrowed or blood flow remains insufficient, placing a stent may be the next step. Stents are used to prop open an artery at the site of a narrowing.

If your physician decides that surgery is a better option, he will obtain any additional X-ray images needed to plan a surgical bypass of the blocked vessel/s and will then conclude the angiogram.

**Risks:** An angiogram is considered a safe procedure, but it is not risk-free. Some patients bruise at the artery entry site and, rarely, that access artery can develop a blockage. Some patients are allergic to the iodine contrast dye and in very rare circumstances, the blockage in an artery can break off and a piece of it can move to another artery.

Be sure to discuss risks with your doctor before the procedure.

**After the angiogram:** Angiograms are usually outpatient procedures. Someone should drive you home. You should rest for the remainder of the day and avoid heavy lifting, stooping or bending for two days.

Learn more about vascular disorders, tests and treatments here.