Coronary Angiogram

What is a coronary angiogram?

A coronary angiogram is an X-ray test that shows how the blood circulates in the arteries supplying blood to the heart. It allows your healthcare provider to see areas where the blood vessels may be narrowed or blocked.

When is it used?

Most often, you will have this procedure after you have had a stress test that shows some abnormal findings. It is also used when you go to the hospital because you are having a heart attack or unstable angina. The coronary angiogram helps pinpoint problems in the heart arteries.

How do I prepare for a coronary angiogram?

Before the procedure, tell your healthcare provider if you have had any kidney problems or reactions to iodine-containing substances, such as X-ray contrast dye or seafood.

Follow your healthcare provider's instructions. You may be asked not to eat or drink anything after midnight on the day of the procedure. Ask your provider which medicines to take the morning of the procedure.

What happens during the procedure?

The healthcare provider injects a local anesthetic into your groin and inserts a needle into the artery that runs from your heart down the leg. The provider puts a guide wire through the needle into the artery and places a catheter over the wire. A catheter is a long, slim, flexible tube used to inject fluid and measure blood pressure.

After removing the guide wire, the healthcare provider guides the catheter to near the opening of the left ventricle (the part of the heart that pumps blood to the body), and guides the catheter to the opening of the coronary arteries. Dye is put into each of the arteries and X-rays are taken to see if they are blocked or narrowed.

The healthcare provider may then put a different catheter into the heart, record the pressures, and inject dye into the left ventricle. This is done to see if the left ventricle is pumping well or if it has been damaged

sometime in the past. Then the provider removes the catheter and applies pressure over the groin to control any bleeding.

What happens after the procedure?

You will stay under observation for several hours to ensure there is no bleeding in the groin. Avoid all strenuous activity for 2 days. Your groin may be tender when you first go home.

Ask your healthcare provider for specific instructions on how to care for yourself at home and when you should come back for a checkup.

What are the benefits and risks of this procedure?

This procedure provides important information about the function of the left ventricle of your heart. It also identifies blocked or narrowed coronary arteries. It helps determine which arteries need immediate treatment. Your treatment might include balloon angioplasty, stenting, surgery, diet, exercise, and medicine.

The risks include:
- You may feel some minor discomfort.
- In rare cases, you may have an allergic reaction to the drug used in the anesthesia.
- The procedure can cause irregular heart rhythms, which could require treatment.
- If the catheter is placed in an artery, a blood clot could form around the catheter.
- You may have an allergic reaction to the dye. (This reaction can be treated with medicine.) The dye could also damage the kidneys.
- The catheter could damage a blood vessel.
- While not common, a heart attack or stroke might be triggered by the procedure.

Complications from this procedure are rare. The risk of death is very low. People with diabetes or kidney disease may be at higher risk for kidney damage from the dye.

When should I call my healthcare provider?

Call your healthcare provider immediately if:
- Your groin becomes more swollen and tender, or if you have any discharge or bleeding.

- Your pattern of chest pain changes.

[Related Topics]

Cardiac Catheterization

Developed by RelayHealth