

## Angiogram

An X-ray imaging examination of blood vessels. The images produced are called an angiogram.

Patients whose physicians suspect they may have enlarged arteries, called aneurysms; narrow or blocked arteries; or malformed arteries.

**To view the heart and arteries. Also called a coronary angiogram or cardiac catheterization.**

Physicians perform angiograms if they suspect abnormal blood flow. When contrast is injected through the catheter into vessels and X-ray images are taken, radiologists can visualize a problem to enable the physician to determine an appropriate treatment.

**Requires surgical incision in the groin area.** Also requires a wire (catheter) to be threaded up the body to the heart through a major artery.

**Only allows for the analysis of the lumen** (the hollow space within the blood vessels).

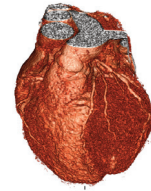
The patient is positioned on an X-ray table, and the heart and blood pressure are monitored. An IV is started so the patient receives fluids and medications.

A small amount of X-ray dye (contrast) is injected into the vessels, which makes blood vessels visible on X-ray images.

**The catheter is inserted into the patient's body, typically the groin, and is guided with the assistance of a fluoroscope, a special X-ray viewing tool.** This allows the physician to determine how well blood moves through vessels of the body, commonly the heart, brain, lung, abdomen, arms and legs. Images are projected on a video screen to enable a diagnosis and treatment to be determined.

**Procedure requires an averages of 30 minutes, plus a minimum of 24 hours recovery time.**

Variable based on patient.



## Computed Tomography Angiogram

A **non-invasive imaging examination** to help physicians determine if fatty or calcium deposits have built up in coronary arteries.

**Patients who have moderate to high-risk profiles for coronary artery disease, but who do not have typical symptoms** (chest pain, shortness of breath, fatigue, etc.); unusual symptoms for coronary artery disease but low to intermediate risk profiles; or unclear or inconclusive stress test results.

**To study narrow, blocked, enlarged or malformed arteries without invasive surgery.** Information obtained during the CTA examination is used to identify the arteries and any blockages that may exist non-invasively, by creating 3D images on a computer. This enables the physician to determine appropriate treatment.

**No incisions.** Normally only requires an intravenous line (IV) in the arm. No catheter or other invasive procedure.

**In addition to analysis of the lumen, CTA provides information about the nature of blockages** (soft plaque vs. hard calcified plaque) **and the wall of the vessel.**

**No incisions. Normally only requires an IV in the arm. No catheter or other invasive procedure.**

The patient is positioned on the CT scanner's table, and the heart and blood pressure are monitored. An IV is started so the patient receives fluids and medications

A small amount of X-ray dye (contrast) is injected into the vessels, which makes blood vessels visible on X-ray images.

The part of the patient's body to be examined is placed inside the opening of the CT scanner. X-rays pass through the body from several angles via a rotating device, and are picked up by special detectors in the scanner, creating cross sectional images without invasive surgery. Typically, higher numbers (16 up to 64) of these detectors result in clearer final images, so Coronary CTA often is referred to as "multi-detector" or "multi-slice" CT scanning. The Baxter CTA is a 64.

**Only 10 minutes from scan to diagnosis, with the actual CT scan only lasting for approximately 10 seconds. Patient can return to normal activity immediately after the procedure.**

**50% less radiation than the most advanced single-source CT systems.**

What is the procedure?

Who needs the procedure?

Why is the procedure performed?

Procedure Requirements

What does it see?

What happens during the procedure?

How long does the procedure take?

Radiation?

