

Liver CT-Angiogram

Here are answers to commonly asked questions about a Liver CT-Angiogram. Ask your doctor if you have additional questions or concerns.

What is a Liver CT-Angiogram?

You may be asked to have this test if the doctor suspects you have a liver cancer. The normal liver cell receives the majority of its blood supply from the portal vein, and a liver tumour receives the majority of its blood supply from the hepatic artery. This difference in blood supply is the basis for the CT-angiogram.

A CT-angiogram is a two-step procedure. First, catheters are placed through the femoral artery in the groin up to the major vessels supplying blood to the liver. X-ray pictures are taken while contrast dye is injected into these catheters.

This is called an angiogram. Once that part of the study has been performed, you will be taken to another room where the CT scanner is located. Contrast dye is once again injected through the catheters in the groin, while a CT scan is performed. By directly injecting contrast dye into the hepatic artery, any tumour tissue that is present will be emphasised and the remaining liver tissue will appear darker.

This test is more accurate than a standard CT scan for confirming the diagnosis, and defining the number of individual tumours present and their precise location.

Unlike CT scans, most CT angiograms are done in a hospital setting. Local anaesthetic is administered before catheters are inserted into the blood vessel in the groin. You may also be given some sedating medication to keep you comfortable during the procedure.

If you have abnormal blood clotting, you may require transfusion of platelets or fresh frozen plasma to reduce the chance of bleeding from the catheter insertion site.

How long will it take?

Typically the test takes 2 - 3 hours to perform and you must stay in the hospital for 4 - 6 hours to be observed for potential complications. You should arrange for a friend or relative to take you home after the procedure.

You should not drive yourself. When you get home you should reduce physical activity for the next 24 hours – this will help reduce the risk of bleeding and bruising at the site where the catheter was inserted. Sometimes, patients are asked to stay in the hospital for overnight observation.

Some people develop an allergic reaction to the contrast injection. If you are aware that you have had an allergic response to contrast dye in the past, or if you are allergic to iodine, you must discuss this with your doctor. Other specific risks of the procedure will be discussed with you.