Overview

A liver-spleen scan is an imaging test used to examine the liver and/or spleen. The liver and spleen are both organs inside the abdomen that have different functions. A radioactive material injected into a person’s veins allows these organs to be imaged with a special x-ray camera.

Who is a candidate for the test?

There are many potential reasons a healthcare provider may want someone to have a liver-spleen scan. These reasons may include:

- to evaluate the size, shape, and position of the liver and spleen. For instance, some people may have more than one spleen, which this test can easily detect.
- to detect abnormal lesions in the liver or spleen, such as a collection of blood or pus or a tumor
- to evaluate the gross function of a diseased liver, such as one affected by hepatitis or cirrhosis. Hepatitis is inflammation of the liver and cirrhosis is permanent scarring of the liver.
- to evaluate certain known tumors of the liver

How is the test performed?

The person having a liver-spleen scan is usually asked to change into a hospital-type gown. An intravenous line, or IV, will be inserted into a vein, usually in the wrist or forearm. Once the IV is inserted, a radioactive material is injected through the IV into the person’s vein. Several minutes after the material is inside the bloodstream, it gets taken up by the liver and spleen. Roughly 15 minutes after the injection of the radioactive material, the person is asked to lie on an x-ray table. A special camera rotates around the person and takes pictures of the liver and spleen. The camera works by detecting the radioactive material inside the body. The test is painless. It takes about 30 minutes for all of the pictures to be taken.

What is involved in preparation for the test?

There is no special preparation required before this test. Certain tests cannot be performed on the same day as a liver-spleen scan. The x-ray department staff may ask a person whether or not he or she has had any of these tests recently. For instance, any test that requires a contrast material called barium inside the intestines may interfere with the liver-spleen scan. Women who are or may be pregnant should tell the x-ray department staff before having this test. This is because the radiation from this test may harm an unborn child.

What do the test results mean?

A normal test will show a normal size, position, and appearance of the liver and spleen. Abnormal results from this test may indicate:

- malfunction of the liver
- a lesion in the liver or spleen, such as a collection of pus or blood, or a tumor
- more than one spleen or absence of the spleen
- a certain type of benign, or noncancerous, tumor called focal nodular hyperplasia