

Sarcomas of Specific Organs - Diagnosis [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board \[2\]](#), 07/2014

ON THIS PAGE: You will find a list of the common tests, procedures, and scans that doctors can use to find out what's wrong and identify the cause of the problem. To see other pages, use the menu on the side of your screen.

Doctors use many tests to diagnose sarcoma and find out if it has spread to another part of the body, called metastasis. Some tests may also determine which treatments may be the most effective. For most types of tumors, a biopsy is the only way to make a definitive diagnosis of cancer. If a biopsy is not possible, the doctor may suggest other tests that will help make a diagnosis. Imaging tests may be used to find out whether a cancerous tumor has metastasized. Your doctor may consider these factors when choosing a diagnostic test:

- Age and medical condition
- Type of tumor suspected
- Signs and symptoms
- Previous test results

In addition to a physical examination, the following tests may be used to diagnose all types of soft tissue sarcomas:

Biopsy [3]. A biopsy is the removal of a small amount of tissue for examination under a microscope. Other tests can suggest that cancer is present, but only a biopsy can make a definite diagnosis. The sample removed during the biopsy is analyzed by a pathologist. A pathologist is a doctor who specializes in interpreting laboratory tests and evaluating cells, tissues, and organs to diagnose disease. A biopsy is the most definitive test for diagnosing sarcoma.

X-ray. An x-ray is a way to create a picture of the structures inside of the body using a small amount of radiation.

[Computed tomography \(CT or CAT\) scan](#) [4]. A CT scan creates a three-dimensional picture of the inside of the body with an x-ray machine. A computer then combines these images into a detailed, cross-sectional view that shows any abnormalities or tumors. CT scans can also be used to guide a needle biopsy, in which a fine needle is inserted into the suspicious area and a sample of cells is gathered for microscopic examination. A CT scan can also be used to measure the tumor's size. Sometimes, a special dye called a contrast medium is given before the scan to provide better detail on the image. This dye can be injected into a patient's vein or given as a liquid to swallow.

[Magnetic resonance imaging \(MRI\)](#) [5]. An MRI uses magnetic fields, not x-rays, to produce detailed images of the body. MRI can also be used to measure the tumor's size. A special dye called a contrast medium is given before the scan to create a clearer picture. This dye can be injected into a patient's vein or given as a liquid to swallow.

The following tests may also be used to diagnose a specific type of soft tissue sarcoma, depending on the parts of the body affected and other factors:

[Bone scan](#) [6]. A bone scan uses a radioactive tracer to look at the inside of the bones. The tracer is injected into a patient's vein. It collects in areas of the bone and is detected by a special camera. Healthy bone appears gray to the camera, and areas of injury, such as those caused by cancer, appear dark.

[Blood tests](#) [7]. A complete blood count (CBC) may be done to measure the different types of blood cells.

[Heart evaluation](#) [8]. A heart evaluation, including an electrocardiogram (EKG or ECG) and an echocardiogram (ECHO), will look for structural abnormalities of the organ and motion of the walls of the heart. This evaluation is used to diagnose cardiac sarcoma.

Coronary arteriogram. During a coronary arteriogram, a dye is injected into an artery and then an x-ray is taken. This test highlights any abnormalities of the arteries.

[Mammography](#) [9]. This is a type of x-ray that looks for any abnormalities or tumors in the breast. This imaging test may be used with MRI scans, CT scans, and a biopsy to diagnose a sarcoma in the breast.

After diagnostic tests are done, your doctor will review all of the results with you. If the diagnosis is sarcoma, these results also help the doctor describe it; this is called staging and grading.

The next section helps explain the different stages for soft tissue sarcoma. Use the menu on the side of your screen to select Stages and Grades, or you can select another section, to continue reading this guide.

Links

- [1] <http://www.cancer.net/cancer-types/sarcomas-specific-organs/diagnosis>
- [2] <http://www.cancer.net/about-us>
- [3] <http://www.cancer.net/node/24406>
- [4] <http://www.cancer.net/node/24486>
- [5] <http://www.cancer.net/node/24578>
- [6] <http://www.cancer.net/node/24410>
- [7] <http://www.cancer.net/node/24716>
- [8] <http://www.cancer.net/node/24509>
- [9] <http://www.cancer.net/node/24584>