

Adenoid Cystic Carcinoma - Diagnosis [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 01/2016

ON THIS PAGE: You will find a list of common tests, procedures, and scans that doctors use to find the cause of the problem. To see other pages, use the menu.

Doctors use many tests to find, or diagnose, cancer. They also do tests to learn if cancer has spread to another part of the body from where it started. If this happens, it is called metastasis. For example, imaging tests can show if the cancer has spread. Imaging tests show pictures of the inside of the body. Doctors may also do tests to learn which treatments could work best.

For most types of cancer, a biopsy is the only sure way for the doctor to know whether an area of the body has cancer. In a biopsy, the doctor takes a small sample of tissue for testing in a laboratory. If a biopsy is not possible, the doctor may suggest other tests that will help make a diagnosis.

This list describes options for diagnosing this type of cancer, and not all tests listed will be used for every person. Your doctor may consider these factors when choosing a diagnostic test:

- The type of cancer suspected
- Your signs and symptoms
- Your age and medical condition
- The results of earlier medical tests

In addition to a physical examination, the following tests may be used to diagnose AdCC

- **Biopsy.** A [biopsy](#) [3] 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. A pathologist then analyzes the sample(s). A pathologist is a doctor who specializes in interpreting laboratory tests and evaluating cells, tissues, and organs to diagnose disease. The pathology of the salivary gland may be complicated, even among experienced pathologists, so it is important that the tissue is examined by a head and neck pathologist who is experienced in diagnosing salivary disease.

The biopsy can be performed using a fine needle biopsy or by surgically removing part or all of the tumor. A fine needle biopsy is also called fine needle aspiration or FNA. This procedure uses a thin needle to remove fluid and cells from the suspicious area. An AdCC tumor is characterized by a distinctive pattern in which bundles of epithelial cells surround and/or infiltrate ducts or glandular structures within the organ. Frequently, diagnosis of AdCC is made after the surgical removal of a tumor first thought to be benign.

- **Imaging tests.** Imaging techniques, primarily [magnetic resonance imaging \(MRI\)](#) [4] or [computed tomography \(CT\) scan](#) [5], are useful to help doctors see the size and location of the tumor before surgery. A [positron emission tomography \(PET\) scan](#) [6] may also be used to determine if the tumor has spread to other parts of the body.
 - **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 pill to swallow. An MRI is very useful for identifying perineural spread of AdCC. Perineural spread is growth of the tumor along nerve branches.
 - **A CT scan** creates a 3-dimensional picture of the inside of the body using x-rays taken from different angles. A computer then combines these images into a detailed, cross-sectional view that shows any abnormalities or tumors. 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 pill to swallow.
 - **A PET scan** is a way to create pictures of organs and tissues inside the body. A PET scan is usually combined with a CT scan (see above), called a PET-CT scan. However, you may hear your doctor refer to this procedure just as a PET scan. A small amount of a radioactive sugar substance is injected into the patient's body. This sugar

substance is taken up by cells that use the most energy. Because cancer tends to use energy actively, it absorbs more of the radioactive substance. A scanner then detects this substance to produce images of the inside of the body.

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

The [next section in this guide is Stages](#). [7] It explains the system doctors use to describe the extent of the disease. Or, use the menu to choose another section to continue reading this guide.

Links

[1] <http://www.cancer.net/cancer-types/adenoid-cystic-carcinoma/diagnosis>

[2] <http://www.cancer.net/about-us>

[3] <http://www.cancer.net/node/24406>

[4] <http://www.cancer.net/node/24578>

[5] <http://www.cancer.net/node/24486>

[6] <http://www.cancer.net/node/24565>

[7] <http://www.cancer.net/node/18416>