Printed April 25, 2015 from http://www.cancer.net/cancer-types/adenoid-cystic-carcinoma/diagnosis

Adenoid Cystic Carcinoma - Diagnosis [1]

This section has been reviewed and approved by the Cancer.Net Editorial Board [2], 10/2014

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 cancer and find out if it has metastasized (spread). Some tests may also determine which treatments may be the most effective. For most types of cancer, 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 the cancer has spread. 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:

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

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

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 a 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. 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 (growth of the tumor along nerve branches) of AdCC.
- 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. 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 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 helps explain the different stages for this type of cancer. Use the menu on the side of your screen to select Stages, or you can select 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/24648