

Adenoid Cystic Carcinoma - Treatment Options [1]

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

ON THIS PAGE: You will learn about the different ways doctors use to treat people with this type of cancer. To see other pages, use the menu on the side of your screen.

This section outlines treatments that are the standard of care, which are the best proven treatments available, for this specific type of cancer. When making treatment plan decisions, patients are also encouraged to consider clinical trials as an option. A clinical trial is a research study to test a new approach to treatment to evaluate whether it is safe, effective, and possibly better than the standard treatment. Clinical trials may test such approaches as a new drug, a new combination of standard treatments, or new doses of current therapies. Your doctor can help you review all treatment options. For more information, visit the [Clinical Trials](#) [3] and [Latest Research](#) [4] sections.

Treatment overview

In cancer care, different types of doctors often work together to create a patient's overall treatment plan that combines different types of treatments. This is called a [multidisciplinary team](#) [5]. The team may include medical and radiation oncologists; surgeons; otolaryngologists, who are ear, nose, and throat doctors; plastic, or reconstruction, surgeons; maxillofacial prosthodontists, specialists who perform restorative surgery in the head and neck areas; dentists; physical therapists; speech pathologists; audiologists, or hearing experts; psychiatrists; nurses; dietitians; and social workers. It is extremely important that this team creates a comprehensive treatment plan before treatment begins, and people may need to be seen by several specialists before a treatment plan is fully developed.

Although eliminating the cancer is the primary goal of treatment, preserving the function of the nearby nerves, organs, and tissues is also very important. When planning treatment, doctors consider how it might affect a person's quality of life, such as how a person feels, looks, talks, eats, and breathes.

Descriptions of the most common treatment options for AdCC are listed below. Treatment options and recommendations depend on several factors, including the type and stage of cancer, possible side effects, and the patient's preferences and overall health. Your care plan may also include treatment for your symptoms and side effects, an important part of cancer care. Take time to learn about all of your treatment options and be sure to ask questions about things that

are unclear. Also, talk about the goals of each treatment with your doctor and what you can expect while receiving the treatment. Learn more about [making treatment decisions](#) [6].

Surgery

Surgery is the removal of the tumor and surrounding tissue during an operation.

Surgical removal of the tumor is the best treatment for AdCC as long as it can be done safely and is likely to have a good outcome. A surgical oncologist is a doctor who specializes in treating cancer using surgery. During surgery, the surgeon will remove the tumor and an area of healthy tissue surrounding it, called a margin. Surgery is considered the most successful if the margin removed during surgery is found to be "clean," which means there is a minimum of 2 millimeters (mm) of cancer-free tissue surrounding the tumor. The extent of surgery will vary depending on the location of the tumor and the structures that are involved.

Because AdCC may frequently spread along nerves, the surgeon should examine and determine whether nerves are involved. Major nerves that are uninvolved should be identified and spared during surgery. Smaller branches of nerves should be analyzed to determine if the cancer has spread to the space surrounding the nerve. For a later stage tumor or one that significantly involves nerves, the surgeon should remove as much of the tumor as possible while sparing the organs and functions of the face.

Side effects from surgery vary depending upon the surgical site. A concern with all surgeries of the parotid gland is that the surgery may damage facial nerves, which can cause the muscles in the face to droop. Sometimes, a facial nerve graft or other reconstructive procedure (plastic surgery) may be used to restore the function of the facial muscles after surgery to remove the tumor. Patients should meet with different members of their health care team to help them make important decisions about treatment, to learn about programs to help them adjust to changes in their body and body image following treatment, and to understand what side effects to expect and how to cope with them. Learn more about [cancer surgery](#) [7].

Occasionally, it is not possible to remove AdCC using surgery. This type of tumor is called inoperable. In these cases, your doctor will recommend another treatment option. See below for more information.

External-beam radiation therapy

Radiation therapy is the use of high-energy x-rays or other particles to destroy cancer cells. The most common type of radiation treatment is called external-beam radiation therapy, which is radiation given from a machine outside the body. A doctor who specializes in giving radiation therapy to treat cancer is called a radiation oncologist. A radiation therapy regimen, which is your treatment schedule, usually consists of a specific number of treatments given over a set period of time.

Radiation therapy is particularly effective for AdCC as an adjuvant therapy by helping to eliminate any microscopic cancer cells that may remain in the body after surgery. Adjuvant therapy is therapy given after surgery. Radiation therapy is not used pre-operatively, meaning before surgery, for this disease, as many surgeons feel that the surgical wound heals better if radiation

therapy is not given prior to surgery.

A specific method of external-beam radiation therapy, known as intensity modulated radiation therapy (IMRT), allows for more effective doses of radiation therapy to be delivered while reducing the damage to healthy cells and causing fewer side effects.

Since radiation therapy is targeted to a specific area, the side effects will depend on where the radiation therapy was given. Generally, during head and neck treatments, people may experience a sore mouth and/or throat that can cause pain and difficulty in swallowing. They may also have a skin reaction or burn that causes some pain.

Before beginning radiation treatment for any head and neck cancer, patients should receive a thorough examination from an oncologic dentist. An oncologic dentist is experienced in treating people with head and neck cancer. Since radiation therapy can cause tooth decay, damaged teeth may need to be removed. Often, tooth decay can be prevented with proper treatment from a dentist before beginning treatment. Learn more about [dental and oral health during cancer treatment](#) [8].

People should also receive an evaluation from a speech pathologist with experience treating people with head and neck cancer. The speech pathologist can teach exercises that will help maintain the strength and flexibility of the muscles used during speech and swallowing.

Long-term side effects of radiation therapy vary with the sites involved, but they may include permanent loss of saliva, causing dryness of the mouth and deterioration of the teeth. In some cases, a drug to stimulate the parotid saliva gland and increase or restore saliva levels may be given. Currently, amifostine (Ethyol), a drug to protect tissues during radiation therapy, is being studied. Scarring or fibrosis, which is the hardening or thickening of the skin and muscles, may develop several months to years after radiation therapy and lead to problems with wound healing, neck stiffness, and trouble swallowing. Other long-term effects that can develop include accelerated narrowing of the carotid arteries, which supply the head and neck with blood, and underactive thyroid disease called hypothyroidism. Learn more about [radiation therapy](#) [9].

Neutron and proton radiation therapy

Neutron therapy is a different form of radiation therapy that uses neutrons rather than x-rays. Compared with conventional radiation therapy, neutrons can deliver 20 times to 100 times more energy along their path length, causing much greater damage to the cancer cells. Neutron radiation therapy has been tested on many different types of tumors, and salivary gland tumors and AdCC has shown the greatest benefit. In certain instances, neutron radiation therapy may be the treatment of choice for AdCC, particularly in areas of the body where it is difficult to perform surgery. However, neutron therapy carries more severe side effects than conventional radiation therapy, such as severe sore mouth and/or throat and difficulty swallowing; therefore, it is generally used more often with people with an inoperable tumor (surgery cannot be performed) or recurrent disease.

Medication to help increase saliva production and protect tissues may be given during this treatment. Neutrons cannot be used to treat large areas of the body for metastatic disease, but they can be used to treat isolated metastases that are causing problems, such as pain, blockage

of part of the lung, or pressure on the spinal cord.

Proton therapy, also called proton beam therapy, is a type of external-beam radiation therapy that uses protons rather than x-rays. At high energy, protons can destroy cancer cells. The advantage of proton therapy is the ability to better control where the radiation is delivered, greatly reducing the damage to normal healthy tissues that surround the tumor. However, proton therapy has not been extensively researched for use in AdCC. Learn more about [proton therapy](#) [10].

Neutron and proton therapy are not widely available. Talk with your doctor for information about the availability of these treatments.

Chemotherapy

Chemotherapy is the use of drugs to destroy cancer cells, usually by stopping the cancer cells' ability to grow and divide. Chemotherapy is given by a medical oncologist, a doctor who specializes in treating cancer with medication.

Systemic chemotherapy is delivered through the bloodstream to reach cancer cells throughout the body. Common ways to give chemotherapy include an intravenous (IV) tube placed into a vein using a needle or in a pill or capsule that is swallowed. A chemotherapy regimen (schedule) usually consists of a specific number of cycles given over a set period of time. A patient may receive one drug at a time or combinations of different drugs at the same time.

Chemotherapy is generally not used for AdCC, as this type of cancer appears to be less responsive to chemotherapy than other types of cancer. Various combinations of chemotherapy have been tried without much success. The combination of chemotherapy and radiation therapy is considered experimental for AdCC.

Because AdCC is a rare disease and, in general, the current chemotherapy is of limited benefit, it is recommended that people with AdCC ask about [clinical trials](#) [3] to treat this disease. It may also be beneficial to get a second opinion regarding treatment options. Learn more about [seeking a second opinion](#) [11].

Getting care for symptoms and side effects

AdCC and its treatment often cause side effects. In addition to treatment to slow, stop, or eliminate the cancer, an important part of cancer care is relieving a person's symptoms and side effects. This approach is called palliative or supportive care, and it includes supporting the patient with his or her physical, emotional, and social needs.

Palliative care can help a person at any stage of illness. People often receive treatment for the cancer and treatment to ease side effects at the same time. In fact, patients who receive both often have less severe symptoms, better quality of life, and report they are more satisfied with treatment.

Palliative treatments vary widely and often include medication, nutritional changes, relaxation techniques, and other therapies. You may also receive palliative treatments similar to those meant to eliminate the cancer, such as chemotherapy, surgery, and radiation therapy. Talk with

your doctor about the goals of each treatment in the treatment plan.

Before treatment begins, talk with your health care team about the possible side effects of your specific treatment plan and supportive care options. And during and after treatment, be sure to tell your doctor or another health care team member if you are experiencing a problem so it is addressed as quickly as possible. Learn more about [palliative care](#) [12].

Metastatic AdCC

If cancer has spread to another location in the body, it is called metastatic cancer. Patients with this diagnosis are encouraged to talk with doctors who are experienced in treating this stage of cancer, because there can be different opinions about the best treatment plan. Learn more about [seeking a second opinion](#) [11] before starting treatment, so you are comfortable with the treatment plan chosen. This discussion may include [clinical trials](#) [3].

Your health care team may recommend a treatment plan that includes a combination of surgery and radiation therapy. Supportive care will also be important to help relieve symptoms and side effects.

For most patients, a diagnosis of metastatic cancer is very stressful and, at times, difficult to bear. Patients and their families are encouraged to talk about the way they are feeling with doctors, nurses, social workers, or other members of the health care team. It may also be helpful to talk with other patients, including through a support group.

Remission and the chance of recurrence

A remission is when cancer cannot be detected in the body and there are no symptoms. This may also be called "no evidence of disease" or NED.

A remission can be temporary or permanent. This uncertainty leads to many survivors feeling worried or anxious that the cancer will come back. While many remissions are permanent, it is important to talk with your doctor about the possibility of the cancer returning. Understanding the risk of recurrence and the treatment options may help you feel more prepared if the cancer does return. Learn more about [coping with the fear of recurrence](#) [13].

If the cancer does return after the original treatment, it is called recurrent cancer. It may come back in the same place, meaning it is a local recurrence, or nearby, which is a regional recurrence. If it comes back in another place, it is a distant recurrence.

When this occurs, a cycle of testing will begin again to learn as much as possible about the recurrence, including whether the cancer's stage has changed. After testing is done, you and your doctor will talk about your treatment options. Often the treatment plan will include the therapies described above, such as surgery and radiation therapy, but they may be used in a different combination or given at a different pace. Your doctor may also suggest clinical trials that are studying new ways to treat this type of recurrent cancer.

People with recurrent cancer often experience emotions such as disbelief or fear. Patients are encouraged to talk with their health care team about these feelings and ask about support

services to help them cope. Learn more about [dealing with cancer recurrence](#) [14].

If treatment fails

Recovery from cancer is not always possible. If treatment is not successful, the disease may be called advanced or terminal cancer.

This diagnosis is stressful, and this is difficult to discuss for many people. However, it is important to have open and honest conversations with your doctor and health care team to express your feelings, preferences, and concerns. The health care team is there to help, and many team members have special skills, experience, and knowledge to support patients and their families. Making sure a person is physically comfortable and free from pain is extremely important.

Patients who have advanced cancer and who are expected to live less than six months may want to consider a type of palliative care called hospice care. Hospice care is designed to provide the best possible quality of life for people who are near the end of life. You and your family are encouraged to think about where you would be most comfortable: at home, in the hospital, or in a hospice environment. Nursing care and special equipment can make staying at home a workable alternative for many families. Learn more about [advanced cancer care planning](#) [15].

After the death of a loved one, many people need support to help them cope with the loss. Learn more about [grief and loss](#) [16].

[17] *The next section helps explain clinical trials, which are research studies. Use the menu on the side of your screen to select About Clinical Trials, or you can select another section, to continue reading this guide.*

Links:

- [1] <http://www.cancer.net/cancer-types/adenoid-cystic-carcinoma/treatment-options>
- [2] <http://www.cancer.net/about-us>
- [3] <http://www.cancer.net/node/18418>
- [4] <http://www.cancer.net/node/18421>
- [5] <http://www.cancer.net/node/25356>
- [6] <http://www.cancer.net/node/24582>
- [7] <http://www.cancer.net/node/24462>
- [8] <http://www.cancer.net/node/24499>
- [9] <http://www.cancer.net/node/24728>
- [10] <http://www.cancer.net/node/24521>
- [11] <http://www.cancer.net/node/25355>
- [12] <http://www.cancer.net/node/25282>
- [13] <http://www.cancer.net/node/25241>
- [14] <http://www.cancer.net/node/25042>
- [15] <http://www.cancer.net/node/25113>
- [16] <http://www.cancer.net/node/25111>
- [17] <http://www.cancer.net/coping-and-emotions/managing-emotions/grief-and-loss>