

TREATMENT UPDATE

Oral and
Head and Neck
Cancer



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Oral and Head and Neck Cancer

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With improved treatments and a team of specialists, people with head and neck cancer can have a better quality of life.

Each year, an estimated 55,000 adults in the United States develop head and neck cancer. These cancers can occur in the mouth, throat, voice box, salivary glands, nose or sinuses. Most head and neck cancers develop in squamous cells. These thin, flat cells form the lining of many parts of the head and neck.

Men are about twice as likely as women to develop head and neck cancer. The leading cause is tobacco use, including cigarettes, cigars, pipes, chewing tobacco and snuff. Alcohol use also raises the risk of head and neck cancer. Having the human papillomavirus is related to a rise in cancer of the tonsil and base of the tongue. This type of head and neck cancer usually occurs in middle-aged men who are non-smokers and have been exposed to the virus.



Treatment Options

Many types of head and neck cancer can be treated effectively, especially when found early. In many cases, an early diagnosis is made by a dentist who finds a red or white patch in the mouth or throat or a doctor who feels an enlarged lymph node in the neck. (Lymph nodes are small bean-shaped organs located throughout the body that remove waste and fluids and help fight infection.)

As with most cancers, there are three main treatments for head and neck cancer that can be used alone or in combination: surgery, radiation and chemotherapy or targeted treatments. (To destroy cancer cells, targeted treatments focus on specific cell mechanisms thought to be important for the growth and survival of tumor cells. Targeted treatments are designed to spare healthy tissues and tend to cause less severe side effects than chemotherapy.)

Surgery

Newer techniques to remove tumors allow surgeons to make smaller incisions (cuts) with the help of lasers, robotic arms and endoscopes (small tubes that contain a light, camera and surgical instruments). These types of surgery can be done through the mouth, without making incisions on the face or neck. CT and MRI scans guide surgeons to the location of the tumor with three-dimensional images.

These scans also help with facial reconstruction, when needed, in advanced cases of head and neck cancer. Surgeons can transplant tissues and nerves from other parts of the body to the head and neck to rebuild the jawbone or tongue, for example. Such reconstruction helps patients speak and swallow and improves the ability to chew and eat. If head and

neck surgery alters the way a person looks, these transplants can improve appearance and quality of life.

Radiation

Several technologies have made radiation treatment safer and more effective:

More precisely focused radiation beams help doctors target tumors with less damage to healthy tissues. For example, three-dimensional conformal radiation maps the location of the cancer and shapes the radiation beams to the tumor. The beams are aimed from several directions, which makes this treatment more effective than standard radiation.

Radiosensitizers are drugs taken by mouth or intravenously (through a vein, also called “IV”). These agents sensitize cancer cells so that radiation is more likely to destroy them.

Radioprotectors are drugs designed to protect healthy cells near tumors from the effects of radiation. For example, the drug amifostine (Ethyol and others) protects the salivary glands of the mouth, reducing the dry mouth that is a common side effect of radiation.

Chemotherapy and Targeted Treatments

Most people with head and neck cancer that is locally advanced (spread from where it started to nearby tissue or lymph nodes) or metastatic (spread to other parts of the body) are treated with a combination of radiation plus chemotherapy or a targeted treatment. The medications, which also can be used by themselves in some cases, include:

Cetuximab (Erbix) is a drug that targets the epidermal growth factor receptor (EGFR), a protein on the surface of



certain cancer cells that helps them grow and divide. Head and neck cancer cells often have more-than-normal amounts of EGFR. By blocking EGFR, cetuximab can slow or stop the growth of cancer. This treatment is given with radiation for head and neck cancer that has spread to more distant parts of the body. It also may be given with or without chemotherapy for metastatic head and neck cancer.

Cisplatin is commonly used with radiation to treat head and neck cancer. It is considered a standard of care. Treatment with cisplatin also may be combined with other medications such as fluorouracil plus cetuximab or docetaxel (Taxotere and others) plus paclitaxel (Taxol and others).

Docetaxel and paclitaxel are taxanes, a type of drug that blocks cell growth by stopping cell division. Doctors may use taxanes in combination with other anti-cancer medications such as cisplatin or carboplatin.

Fluorouracil is used to treat some patients with head and neck cancer whose tumor has returned in the same location or spread to other parts of the body. Cisplatin and cetuximab also may be given with this medication.

In the future, finding certain genetic changes in head and neck cancers will help doctors tailor treatments to specific tumors.

Your Health Care Team

People with head and neck cancer benefit most by consulting a team of specialists. We have already discussed head and neck surgeons and radiation and medical oncologists. Your health care team may also include:

- **Otolaryngologist** to manage ear, nose and throat health;
- **Dentist** to maintain good oral health;
- **Reconstructive (plastic) surgeon** to improve appearance or function;
- **Speech pathologist** to help improve the ability to talk and swallow;
- **Registered dietitian** to make sure patients eat properly;
- **Physical therapist** to ensure that muscles in the head and neck continue to stay strong and function properly;
- **Oncology social worker** to help create a support network and develop ways to cope with cancer treatment and its side effects.

It's important that you see your health care team regularly so they can track your progress and your oral health as well as manage any treatment symptoms you may be having. Don't hesitate to report any changes in your health. By keeping an open line of communication with your health care team, you can help improve your quality of life and the ability to carry out daily activities.

Preserving Dental Health

Treatments for head and neck cancer can affect the health of the teeth, gums, lining of the mouth and salivary glands. Ideally, people with head and neck cancer should see a dentist, working with their health care team, at least two weeks before starting any treatment. The goal is to prevent or reduce treatment side effects in the mouth.

A number of steps can be taken to maintain oral health before, during and after treatment:

Pre-radiation fluoride treatment. Radiation directed at the salivary glands can affect these organs, which in turn may cause tooth decay (cavities) over time. People about to undergo radiation treatment of the mouth can be given high doses of fluoride to reduce damage to the teeth and gums.



Denture check. Dentures should be evaluated for proper fit before cancer treatment. Adjustments can then be made to reduce the risk of injury to the gums and mouth tissues during treatment.

Mouth care. Head and neck radiation can cause tooth decay (as noted on page 7), gum disease, mouth sores, dry mouth, taste changes and jawbone stiffness. To help manage these side effects, it's important to keep the mouth moist and clean while receiving radiation.

Rinse your mouth several times a day with one-quarter teaspoon of baking soda and one-eighth teaspoon of salt dissolved in one cup of warm water. It also helps to rinse frequently with plain water. To keep your mouth healthy, avoid spicy or crunchy foods, tobacco and alcohol (including mouthwashes that contain alcohol).

Post-treatment plan. Even after you finish treatment, especially radiation, it's important to see your dentist regularly. If you notice soreness or an area of the gum that isn't healing or any other oral health care issue, report it to your health care team, including your dentist, doctor and nurse as soon as possible.

Managing Treatment Side Effects

In this section, we discuss some of the specific side effects you may experience and ways to manage them.

Mucositis (Mouth Sores)

Radiation treatments for head and neck cancer and some types of chemotherapy can cause sores inside the mouth and on the lining of the throat and digestive tract. These sores can be a serious problem because they can cause pain and lead to infections, making it difficult to eat, drink and swallow. Once treatment ends, mouth sores do disappear within a few weeks. If you experience any changes in your mouth, be sure to report them to your doctor or nurse.

There are a number of things you can do to ease mouth sores and pain:

Choose a soft-bristle toothbrush for brushing your teeth.

If toothpaste irritates your mouth, use a mixture of a half teaspoon of salt with four cups of water.

Drink plenty of fluids.

Tell your doctor if you are experiencing mouth pain.

It's important to manage this symptom because it can affect your quality of life and even slow progress toward better health. When your pain is controlled, you will be better able to eat and drink fluids. There are several ways to soothe mouth pain, but before you begin any of these treatments, ask your doctor about the best ones for you. Some require a prescription:

- Ice chips or Popsicles
- Ibuprofen (such as Motrin) or acetaminophen (such as Tylenol) for mild pain



- Over-the-counter oral anesthetics, such as Anbesol, Xylocaine or Orajel. Let your doctor know if you are using them, especially if he or she prescribes a mouthwash containing lidocaine.
- Gelclair is an oral gel designed to coat and soothe mouth sores by forming a protective barrier in the mouth. This product is available by prescription only.
- “Magic mouthwash” is another prescription product. It contains Maalox to coat the mouth, lidocaine to relieve the pain and an antihistamine to soothe the mouth sores. Some pharmacies that specialize in cancer care offer their own version of magic mouthwash.
- Opiates, a class of drugs that includes morphine, also may be prescribed to help you cope with mouth pain. A fast-acting opiate called fentanyl citrate (Actiq and others) is available in a berry-flavored lozenge on a stick. Like a cough drop, the lozenge dissolves in the mouth, and the drug is delivered quickly into the bloodstream.

Dry Mouth

This condition is mainly caused by radiation that affects the salivary glands. For some people with head and neck cancer, this side effect may last long after treatment has ended, making it challenging to taste, chew, swallow or speak.

There are a number of things you can do to keep your mouth moist during and after radiation treatment and help relieve dry mouth:

Sip water or sugarless drinks. Soups that are not salty, milk shakes, smoothies or ice cream can help as well, as can sucking on ice chips.

Avoid caffeine and alcohol. Coffee and other caffeine-containing beverages and drinks containing alcohol can lead to dehydration (loss of too much water from the body).

Eat foods that are moist, such as fruits and vegetables. Use gravies and sauces, in moderation, to help moisten foods.

Avoid bread and foods that are breaded. These foods tend to absorb moisture from the mouth.

Damage to the Lower Jaw

A rare condition called osteoradionecrosis sometimes occurs in patients who have had high-dose radiation to the lower jaw. Over time, the ability of the lower jaw to fight infection is reduced by the radiation, and this may lead to bone complications. Talk to your doctor about your risk for this side effect and make sure your dentist is aware of radiation treatments that might affect your jawbone health in the long term.

Improving Speech and Swallowing

Treatments for head and neck cancer can lead to changes in the voice and the ability to swallow. How these changes affect each person depends on where the tumor is, the types of treatments given and the success of surgery to repair the tissues (reconstruction). With the improved surgical techniques described earlier, patients often have shorter hospital stays and faster, more effective recoveries. More focused radiation and targeted treatments can reduce damage to healthy cells.

Ideally, people with head and neck cancer should be evaluated by a speech pathologist before treatment begins to measure their ability to speak and swallow. This will help other members of the health care team choose the most effective treatments that will also reduce side effects. An early



evaluation will help your doctor or nurse better manage any symptoms that occur. Research shows that many long-term speech and swallowing challenges can be avoided with a pre-treatment evaluation.

New research also has shown that specific swallowing exercises, designed to target the muscle groups affected by head and neck cancer treatment, can be effective in preventing swallowing problems and avoiding the need for a feeding tube.

The best results occur when these exercises are started before treatment begins. Once swallowing difficulties have occurred, it is much more challenging for doctors to help you manage them. Ask your doctor to refer you to a speech pathologist who can evaluate your swallowing ability and teach you the exercises.

After treatment is finished, swallowing difficulties that occur months or years later could be a sign that the head and neck cancer has recurred (come back). So it's important to stick to a regular schedule of checkups with your doctor and report any change in your ability to swallow.

Your Support Team

When you are diagnosed with head and neck cancer, you're faced with a series of choices that will have a major effect on your life. Your health care team, family members and friends will likely be an invaluable source of support at this time. You can also turn to these resources:

Oncology social workers provide emotional support for people with cancer and their loved ones. These professionals can help you cope with the challenges of a cancer diagnosis and guide you to resources. CancerCare offers free counseling from professional oncology social workers who understand the challenges faced by people with cancer and their caregivers. We can work with you one-on-one to develop strategies for coping with treatment and its side effects.

Oncology social workers can also help you communicate with your doctor and other members of your medical care team about the health care issues that are important to you.

Support groups provide a caring environment in which you can share your concerns with others in similar circumstances. Support group members come together to help one another, providing insights and suggestions on ways to cope. At CancerCare, people with cancer and their families can participate in support groups in person, online or on the telephone.

Financial help is offered by a number of organizations to assist with cancer-related expenses such as transportation to treatment, child care or home care.

To learn more about how CancerCare helps, call us at 800-813-HOPE (4673) or visit www.cancercare.org.

Maintaining Good Nutrition and Hydration

Patients who maintain their weight throughout treatment tend to tolerate treatments better and have a faster recovery from side effects. To help you meet your nutritional goals, ask your doctor to refer you to a registered dietitian (RD). He or she can advise you on the most healthful way to eat and drink to help you manage treatment side effects.

During treatment, weight loss is common. When people find it difficult to chew and swallow, they tend to eat less. But weight loss can cause delays in treatment and slow the healing process. With the correct diet you can maintain your weight and preserve the lean muscle mass needed for strength. If you lost a lot of weight during treatment but are now at your ideal body weight or above, you do not need to return to your previous weight.

Here are a number of tips for healthful eating:

Try different foods to find the ones you like. If your treatment has caused changes in taste, this may improve over time as you heal. Perhaps foods you didn't like before treatment may appeal to you now.

Eat small, frequent meals that include protein from eggs, beans, dairy products and meats. Protein helps protect lean muscle mass and aids in healing.

Include fortified food in your diet. Many cereals and liquid diet supplements such as Ensure are fortified with protein and vitamins. Because many people are allergic to soy and whey proteins, ask your RD and doctor to advise you on protein supplements before you use them.

Take a daily multivitamin to help complete your diet. You only need a vitamin that meets 100 percent of your daily needs. The American diet is highly fortified; many foods already have added vitamins.

Eat small amounts of pureed foods. This helps preserve the ability to swallow.

Drink plenty of fluids. To avoid dehydration, drink water, juice or sport drinks. Dehydration can lead to nausea, dry mouth, thick saliva, fatigue and dizziness.

Keep a daily food journal. A record of what you eat can be helpful to your health care team. It will also make you more aware of how often and how much you are eating.

Read food labels. The information provided on labels helps keep track of how much protein you are eating and which foods to avoid because they are too salty, which can make you thirsty.

Even if you have a feeding tube, you should continue to eat whenever possible and swallow, even if it is just your own saliva. Patients who do not take anything by mouth for more than two weeks often have more difficulty swallowing. An RD can help you find foods—and ways to prepare them—that you can tolerate. This type of specialist also can help you decrease the use of your feeding tube and resume a normal diet.

Resources

CancerCare®

800-813-HOPE (4673)
www.cancer.org

American Cancer Society

800-227-2345
www.cancer.org

Cancer.Net

Patient information from the American Society of Clinical Oncology
www.cancer.net

National Cancer Institute

800-422-6237
www.cancer.gov

American Head and Neck Society

310-437-0559
www.headandneckcancer.org

Head and Neck Cancer Alliance

866-792-4622
www.headandneck.org

Support for People with Oral and Head and Neck Cancer

800-377-0928
www.spohnc.org

The Oral Cancer Foundation

949-646-8000
oralcancerfoundation.org

CLINICAL TRIALS WEBSITES

Coalition of Cancer Cooperative Groups

877-227-8451
www.CancerTrialsHelp.org

EmergingMed

877-601-8601
www.emergingmed.com

National Cancer Institute

800-422-6237
www.cancer.gov/clinicaltrials

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