

Mouth Care for Radiation Therapy Patients - Head and Neck Area

Mouth care is essential for patients receiving radiation therapy to the head and neck area because the therapy can cause temporary and permanent changes to the mouth. Therefore, it is important to recognize side effects and learn how to treat them. Caring for your mouth will help you minimize changes and possible risk of severe health problems.

Before receiving any radiation therapy to the head and neck area, you should see a dentist. It is the job of the dentist to:

- Evaluate you for infection and/or mouth disease.
- Decide to perform any tooth extractions or gum surgery.
- Determine oral care guidelines.

Do not have gum surgery or teeth removed within areas of your mouth that have been treated with radiation. Having surgery on a radiated jawbone may create severe healing complications, including serious infections or osteoradionecrosis (bone death). Before any oral surgery, have your local dentist contact your physician to discuss the radiation therapy and treatment limitations.

Temporary Changes

Most temporary changes usually get better within a few weeks after radiation is completed, but some may take longer. These changes may be painful and/or make it difficult for you to eat, swallow or talk. Temporary changes may include:

- Mouth or throat soreness.
- Painful gums or tongue.
- Mouth and/or throat sores (ulcers), which may also increase your risk of getting an infection.
- Taste changes. Some foods may begin to taste bitter, metallic or seem to have no taste. Most taste changes will improve over time.

Permanent Changes

Radiation therapy leads to a decrease in the amount of saliva or “spit” (dry mouth) that the major salivary glands produce. Because saliva helps to protect the teeth and remove bacteria from the mouth, this change can cause your teeth to become very sensitive and decay rapidly.

Radiation therapy to the lower area of the face affects blood circulation in your jawbone, which can prevent or slow your ability to heal sores or wounds. Always tell your dentist before having any dental work done that you have had radiation therapy.

Meet with Your Dentist

Before radiation therapy begins, it is important to prevent or reduce problems from occurring by having your teeth cleaned.

After radiation therapy, it is important to have your teeth cleaned within six months and then every six months as recommended by the American Dental Association. This will help prevent infection in the gum tissues.

Before having any dental work, always tell your dentist that you had radiation therapy. You may have cavities filled, crowns or simple root canals done after the temporary effects have subsided. If needed, you may have dental x-rays and local anesthesia since they do not disturb the jawbone.

Practice Daily Oral Care

The following will be a lifelong routine.

- Wash your hands before you do any oral care.
- Carefully floss your teeth with waxed dental floss before you brush. Flossing may become difficult if mouth sores develop. If this happens, discuss flossing with your dentist before you stop this important hygiene step. If flossing is not one of your routine hygiene habits, speak to your dentist about the correct method before beginning.
- Brush your teeth, gums and tongue after each meal and before bedtime with a soft-bristled toothbrush (e.g., Butler Gum[®] sensitive, Colgate[®] sensitive or Biotene[®] soft). Because the bristles on soft or sensitive toothbrushes are softer, your brushing motion must be slower to allow the bristles to flow along the gum line and clean off the food and plaque deposits.
- If you cannot brush your teeth after meals, rinse your mouth with water.
- Use regular flavored fluoride toothpaste without tartar control.
- After brushing your teeth, rinse your mouth with a baking soda solution. Do not use any store-bought mouthwash product as it may contain alcohol or phenol that may irritate your mouth.
- Each day, make your own baking soda solution by mixing one teaspoon of baking soda with 12 to 14 ounces of water (e.g., a 16-ounce water “sports” bottle). Swish one to two ounces of the baking soda solution in your mouth for 30 seconds and then spit it out. You may also gargle with the rinse for several seconds before spitting it out. Rinse every two or three hours while you are awake, especially after meals and at bedtime. Do not rinse with the baking soda more than six times a day.

Apply Fluoride

Your dentist may provide you with fluoride trays (sometimes referred to as fluoride carriers). These are like a “super tooth-paste” as they allow for very high concentrations of fluoride to be applied to your teeth. Your dentist will provide instructions with how to use the fluoride trays.

Use Caution with Dentures, Partials and Removable Prosthesis

Be careful when inserting or removing dentures, partials or removable prosthesis. Always remove your dentures during your radiation therapy treatment. If your dentures, partials or removable prosthesis fit poorly, you may want to leave them out completely during your radiation therapy. They may injure your gum tissue and possibly interfere with your treatment due to ulcerations. If you have any problems, tell your physician.

At bedtime, soak your dentures, partials or removable prosthesis in a container of over-the-counter denture cleaning solution. Soak and clean them thoroughly with water before placing them in your mouth.

Keep Your Mouth and Lips Moist

Your lips and the inside of your mouth may become dry because of fever, medication or changes related to radiation therapy. To help keep your mouth moist during radiation treatment:

- Rinse your mouth with a baking soda solution after meals and at bedtime. Do not rinse with baking soda more than six times a day. (See the previous page for solution instructions.)
- Drink eight to 12 eight-ounce glasses (two to three liters) of non-alcoholic, non-acidic, non-caffeinated fluids each day, such as water or flavored non-carbonated beverages, unless your doctor has instructed otherwise.
- Suck (do not chew) on ice chips or popsicles. You can also chew sugarless gum. Do not use mints or hard candies.
- Use a lubricant such as aloe vera or lanolin on your lips. You can also use an unflavored lip balm or moisturizer. Ask your dental oncologist or pharmacist for suggestions on particular brands.
- Tell your doctor or nurse if your mouth continues to feel dry.

Manage Your Diet During Radiation Therapy

It is important to keep your diet soft and non-irritating throughout your treatment, especially during the last several weeks. To help prevent soreness, eat foods that feel good in your mouth.

You will be weighed every week during your treatment to monitor any weight gain or loss. A dietitian will see you during the first two weeks of treatment, if needed. If you have constipation, please talk with your doctor and dietitian.

Do:

- Eat foods that are soft, liquid, blended or moist like broth, gelatin, puddings, milkshakes, cooked cereals and frozen juice bars.
- Eat foods that are a cold or lukewarm temperature.
- Eat smaller bites of food, chewing slowly, and sip liquids with your meals.
- Drink two to three liters of nonalcoholic, non-caffeinated fluids each day like non-acidic juices and/or sports drinks.

Do not:

- Eat crunchy, abrasive foods like chips, popcorn, granola bars, etc.
- Eat hot or spicy foods or liquids.
- Eat irritating, acidic, salty or highly seasoned foods.

Side Effect Relief

If you notice sores (ulcers), bleeding white patches or a white coating on your tongue, tell your doctor or nurse. If the sores are painful or keep you from eating, ask your doctor about products that may help reduce the discomfort. If the ulcers become severe, you may need to eat finely ground, pureed foods or use liquid nutritional supplements.

For more information, please refer to *How to Manage Mouth and Throat Soreness*. If you do not have a copy of this information sheet, ask your health care professional for one.

If your mouth becomes too sore to brush your teeth, you can do the following to help:

- Drink plenty of water between meals.
- Use a soft-bristled toothbrush when brushing. If your toothpaste burns, use baking soda.
- Rinse your mouth with either a prescription mouthwash and/or with the baking soda solution.
- Use the baking soda rinse every two or three hours while awake, such as after meals and at bedtime. Do not rinse with the baking soda more than six times a day.
- If you continue to experience mouth soreness, tell your doctor or nurse.