

## Mouth Care after Head and Neck Radiotherapy

- ▶ Get your teeth cleaned every 3-6 months.
- ▶ Get dental x-rays every 6 months to 1 year to help detect dental problems early.
- ▶ Use your fluoride EVERY DAY!

### Why Use Fluoride Trays?

Daily fluoride (0.4% stannous or prescription 1.1% sodium fluoride) will help teeth resist the tooth decay caused by xerostomia (dry mouth). Radiation therapy to the head and neck area can lead to destruction of all teeth in a short time. This is due to permanent changes in the quality and quantity of saliva. Compliance with the following fluoride regimen will greatly reduce the risk of tooth problems after cancer therapy.

### Custom Fluoride Trays



### Radiation Caries (Tooth Decay)



This patient did not use fluoride as directed.

## Directions for Fluoride Trays

- ▶ At bedtime, remove dentures from mouth. Brush and floss teeth thoroughly. Note: It is very important to remove all food and plaque from teeth before using fluoride. Food and plaque can prevent the fluoride from reaching the surface of the tooth.
- ▶ Place a thin ribbon of the prescribed fluoride gel into each tooth space of the upper and lower trays. Spread fluoride into a thin film coating the inside of the trays by using a cotton-tipped applicator, finger or toothbrush.
- ▶ Place the trays on your upper and lower teeth and let them remain in place for 5-10 minutes. Only a small amount of fluoride should come out of the base of the trays, otherwise there may be too much fluoride in the trays.
- ▶ After 5-10 minutes, remove the trays and thoroughly spit out the residual fluoride.
- ▶ Very important - do not rinse mouth, drink or eat for at least 30 minutes after fluoride use.
- ▶ Begin using fluoride in the custom trays no longer than one week after radiotherapy is completed.
- ▶ Repeat daily for the rest of your life! Remember that tooth decay can occur in a matter of weeks if fluoride is not used properly.

### Care for Fluoride Trays

- ▶ Rinse and dry trays thoroughly after each use. To clean, brush with a toothbrush and toothpaste or use a denture cleaner.
- ▶ Occasionally, the trays can be disinfected in a solution of bleach and water: 1 tbs. of bleach in 1/2 cup of water. Soak them for about 15 minutes. Rinse thoroughly.
- ▶ If the trays become covered with hard water deposits, soak them in white vinegar overnight and brush them the next morning.
- ▶ Do not use hot water or heat on the trays!



# Mouth Care for Head and Neck Radiation Therapy Patients

Patient information from the  
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## Dental Examination Before Head and Neck Radiation Therapy

A dental examination and x-rays before beginning head and neck radiation therapy will help identify teeth that are in poor condition. Severe gum disease, tooth decay, or teeth with abscesses (infection) may need to be removed before starting radiation therapy **if they are in the area receiving a high dose of radiation**. If teeth are removed after radiation therapy, the jaw bone may not heal properly and a serious complication can result. The problem with poor healing is a lifelong risk and depends on the dose and location of the radiation, particularly to the jaws. After radiation therapy, you should always check with your radiation oncologist before getting any teeth removed or before having surgery that affects the gums.

A dental evaluation should be performed **as soon as possible** after a diagnosis requiring radiation therapy. A professional dental cleaning 1-2 weeks before the start of radiation therapy is recommended. If teeth need to be removed, a period of at least 2 weeks is recommended for healing to take place before starting radiation therapy. It is important to have the dental evaluation soon after diagnosis so that treatment can proceed with minimal delay.

It is also important to visit your dentist before head and neck radiation to learn how to take care of your teeth and mouth during and after radiation therapy. Severe tooth decay (radiation caries) is a very common problem after radiation. Radiation caries can occur because of the inability of the saliva to destroy bacteria that cause tooth decay, in addition to the inability of the saliva to strengthen the enamel of the teeth. **Radiation caries (tooth decay) can occur within weeks after completion of radiation therapy and can be a lifelong problem.** Your dental visit will include impressions of your teeth and mouth to create custom fluoride trays. Daily application of prescription fluoride gel in custom trays will help prevent tooth decay that can result from head and neck radiation therapy.

## Oral Hygiene

- ▶ Brush your teeth twice daily. Use a super-soft toothbrush to minimize discomfort when you have sore gums.
- ▶ Brush in a gentle, circular motion to include all surfaces of every tooth. Floss daily but gently, especially if your mouth is sore.
- ▶ Each day, gently brush your tongue and tissues with a soft toothbrush to remove germs.
- ▶ Soften the bristles of your toothbrush with warm water before use.
- ▶ Use a water-irrigating device (low setting) to remove food from your mouth and teeth.
- ▶ Disinfect your toothbrush at least once weekly by soaking in a fresh solution of bleach and water (1 tbs. bleach per ½ cup water). Thoroughly rinse toothbrush before placing in your mouth. Change toothbrush weekly.
- ▶ Toothpastes formulated for children or dry mouth may minimize burning or irritation.
- ▶ When your mouth is no longer sore, you can use regular toothpaste, a regular soft toothbrush or an electric toothbrush with soft bristles.

## Sore Mouth

- ▶ Use saltwater and baking soda rinses (1 tsp salt and 1 tsp. baking soda in one quart of fresh water) throughout the day to sooth your mouth. To increase effectiveness, stagger the use of mouth rinses and fluoride throughout the day, allowing at least one hour between each rinse.
- ▶ For pain, you may be prescribed a rinse containing a numbing medication to use 15 minutes before eating. Eat small bites and chew thoroughly to reduce the risk of choking when using these medications.
- ▶ Remove dentures if your mouth is sore. Avoid using them until your mouth heals. Disinfect all dentures daily with an antimicrobial denture cleaner. Dentures without metal may be soaked in a fresh solution of bleach and water (1tbs. bleach in ½ cup of water). Rinse the dentures well before placing them in mouth.
- ▶ Keep your mouth and lips well lubricated with a water-based lubricant, not petroleum jelly. Do not

use any oral lubricating products immediately before your radiation treatment.

- ▶ If you continue to have burning mouth after completing radiation therapy, it is possible that you could have a fungal infection, also called thrush or candidiasis. Your doctor or dentist can prescribe an antifungal medication for you. You should disinfect your fluoride trays and tooth brush daily. Eating yogurt may also help reduce the recurrence of thrush by introducing good organisms into your mouth and digestive system.

## Dry Mouth

- ▶ Pilocarpine (Salagen) 5mg, qid, (prescription required) MAY be helpful in stimulating saliva in some cases.
- ▶ Try special food preparation. Blended and moist foods are easier to swallow.
- ▶ Sip liquids with your meals.
- ▶ Try sugarless candy or gum to stimulate salivary flow.
- ▶ Try over-the-counter artificial saliva products.
- ▶ Sip plain water throughout the day (sometimes preferred over artificial saliva.)
- ▶ Avoid the use of alcohol-based mouth rinses.
- ▶ Try water and glycerin (few drops only) mixed in a small aerosol spray bottle.
- ▶ Avoid the use of tobacco and alcoholic beverages.
- ▶ Avoid sugary foods that can cause cavities.
- ▶ Avoid sharp, crunchy foods, like taco chips, that could scrape your mouth.
- ▶ Avoid toothpicks because they can hurt the tissues in your mouth. Ask your dentist about an interproximal brush to clean between your teeth.

## Taste Loss

- ▶ Usually taste begins to slowly return after radiation therapy. Most people recovers their taste by 4-6 months after therapy is completed.

Please contact the Oral Medicine Clinic with any questions about your oral health.  
(352) 273-6741