Radiation Oncology
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## RADIATION THERAPY AND MOUTH CARE

Radiation therapy can effectively treat many types of cancer, but it also can have unwanted side effects. For example, patients treated with radiation for cancers of the head and neck may notice short- or long-term changes in their mouths.

Short-term side effects can include mouth pain, band changes in the way food tastes. If you have any these symptoms, tell your physician or radiation therapist. During treatment, avoid smoking, citrus fruitand juices, alcohol and beverages that are very hot or very cold. All of these can irritate sensitive tissues in thmouth. Long-term side effects can include "xerostomia" (zero-stoh-mee-uh) or dry mouth. This happens whenthe radiation used to destroy cancer cells also damages the glands that produce saliva. Saliva serves severaimportant functions: It helps prevent tooth decay anlubricates the mouth for talking and eating. Without enough saliva, people are more susceptible to mouthinfections and tooth decay. Talking and eating alsbecome uncomfortable.

To help prevent problems associated with dry mouth, patients who receive radiation therapy for head or neck cancer must take excellent care of their mouths:

- Brush your teeth twice a day with a soft toothbrush and floss regularly with waxed floss.
- Visit your dentist at least twice a year, or more often if needed.
- · Avoid commercial mouthwashes because they contain ingredients that can irritate your mouth, such as alcohol.

Instead of using commercial mouthwashes, make your own by mixing a teaspoon of baking soda in a quart of water. Rinse your mouth with this mixture often to keep it wet and wash away bacteria. This also will reduce mouth soreness and prevent infection. Your physician also may prescribe a medication that can help relieve dry mouth.

In addition, you will need to apply fluoride gel to your teeth every day because the fluoride in toothpastes isn't enough to prevent tooth decay in patients who have had radiation therapy for head or neck cancer. You may be able to brush this gel on your teeth with a toothbrush, or you may use custom-made plastic molds to hold the gel on your teeth for a few minutes. Avoid eating, drinking or rinsing your mouth for 30 minutes after you apply the fluoride.

Another potential side effect of radiation therapy in the head and neck is scar tissue on the muscles and joints of the jaw. This can make it difficult to open your mouth wide enough to eat normally and brush and floss your teeth. Physical therapy can help correct this problem.

If you need oral surgery in the area that was treated with radiation, it should be performed by a dental oncologist (a dentist who specializes in caring for cancer patients). Radiation affects the jawbone's ability to heal, and oral surgery in a previously irradiated area can lead to serious complications. If your dental health is poor, it may be advisable to have teeth extracted before you begin your radiation therapy treatments. If you have questions about how radiation therapy affects your oral health, talk to your physician or radiation therapist.

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