

ORAL CARE AFTER HEAD AND NECK RADIOTHERAPY

INTRODUCTION

During the course of your radiation therapy, many normal structures will inadvertently be irradiated because they lie within the treatment field. This can lead to complications following radiation therapy. Below, are possible complications and some steps you can take to prevent or minimize them.

FACTS FOR PATIENTS & CAREGIVERS

The **sore mouth** and taste loss often experienced during radiation therapy (**Mucositis**) usually occurs two weeks after the start of treatment and improves after the treatments have stopped. Because of the irradiation of the taste buds, patients may develop a partial (hypogeusia) or complete (ageusia) loss of taste during treatment. Usually the sense of taste returns within four months after treatment, although permanent impairment may result. During this acute time, stay away from spicy or abrasive foods, alcohol, tobacco, and strong mouthwashes and leave your dentures out. These can be refitted or remade after your tissues have healed.



A **dry mouth (Xerostomia)** occurs because salivary glands are particularly sensitive to radiation. During irradiation, the glandular secretions are usually diminished, thick, sticky, and can be very bothersome to the patient. Depending on the radiation portals, there may be some regeneration several months after treatment, and the undesirable signs and symptoms of xerostomia, (discomfort, difficulty in speech and swallowing) are at least partially reversed. If the major salivary glands are within the field, 90% or more of the salivary flow can be lost by the end of the treatments. This effect may very gradually reverse to some extent following therapy, but it is often a permanent problem. Frequent sips of water and water rinses are particularly helpful for partial control of radiation-induced xerostomia. Your doctor can recommend other products that may help keep your mouth moist.

An extremely aggressive form of **tooth decay (Radiation caries)** occurs in patients who have had radiation therapy to the head and neck and who have diminished saliva production. If unchecked, it can completely destroy your teeth in a few short months or years. You must maintain excellent oral hygiene by following the

brushing and flossing instructions that have been demonstrated. To further prevent the problem, your doctor has prescribed the daily use of topical fluoride. Topical fluoride should be used for the rest of your life because the threat of radiation caries is lifelong.



Radiated bone loses its ability to heal and so must be protected by keeping it covered with intact skin. This is the most dangerous complication of radiation therapy. **(Necrosis.)** Avoid everything that could injure the soft tissues that cover irradiated bone (mechanical, chemical, and thermal irritants).ill-fitting dentures. Avoid abrasive foods (for example, hard sharp chips), poor oral hygiene, very hot foods (for example, pizza cheese), and sunburn of the irradiated tissues. If soft tissue irritation or ulceration appears, see your doctor right away. Tooth extraction within the irradiated field is particularly dangerous and can result in the loss of much surrounding bone. Good hygiene and the use of topical fluoride is your best defense against tooth loss. If tooth extraction does become necessary, be certain that your dentist knows you have had radiation therapy.

Follow-up. You should follow up with a dentist who is familiar with radiation patient management.