

### Dental Care for the Cancer Patient Part 2 of 3



Last week we briefly reviewed some of the complications such as delayed healing, dry mouth and increased risk of cavities and oral infection during cancer treatment. This week we will discuss the specific dental care needs for cancer patients being treated with chemotherapy and or radiation.

Mucositis resulting from cancer treatment often presents as painful ulcers in the mouth. Fortunately this condition normally resolves on its own once the treatment is completed. To help you get through the tough period your dentist may prescribe topical medication that can both soothe and accelerate healing. If these ulcers become infected with bacteria or yeast, antibiotic medications may be needed. Since our resistance is low during cancer therapy, an infection should be treated aggressively.

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treatments is dry mouth. Our regular readers may recall an article we ran a few months ago called "Ain't Worth Spit" which stressed the vital role saliva plays in protecting our mouths and teeth.

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A diminished supply of saliva, or a change in the quality of saliva, deprives the mouth of the protective enzymes, and the calcium and phosphate needed for keeping our teeth hard. When the mouth is dry our teeth are prone to demineralization (softening of enamel and dentin), which in turn can lead to cavities or hypersensitive teeth.

To help alleviate the problems associated with dry mouth your dentist may prescribe guaifenesin that improves salivary quality. Oral Balance, and Biotene products work as substitutes and may be recommended by your dentist to help offset the effects and discomfort associated with inadequate moisture in the mouth. Chewing sugarless gum can in some cases stimulate salivary flow, but keeping well hydrated by drinking lots of water is one of the most important things you can do for this problem.

Coffee, tea and colas should be avoided since caffeine acts as a diuretic (increases urine output) which makes the dryness even worse. In addition, the acidity of these beverages accelerates the break-

down of already vulnerable tooth structure.

Scrupulous oral hygiene must be maintained indefinitely since dry mouth can be an ongoing problem, and frequently is a permanent side effect of head and neck radiation. Daily topical fluoride application is an effective means of combating demineralization and decay and is best delivered using customized trays that can be made by your dentist or hygienist.

Radiation therapy becomes an especially important concern to the dentist when the cancer being treated is in the head and neck area. The purpose of most cancer treatment is to destroy cancerous cells which are fast growing. Cancer cells need more oxygen and nutrients than normal cells and one way radiation works is to damage the blood vessels that feed the tumor. The tumor cells are essentially starved and thus die off.

However, the blood vessels that supply normal tissues are also damaged and thus the health of normal bone is compromised. The most severe side effect of radiation therapy is osteoradionecrosis (ORN), or bone death. This condition occurs in three to ten percent of patients. It can occur spontaneously but is most likely to occur after trauma to the bone occurs, such as when a tooth is extracted. ORN can result in mutilating loss of bone, and in the worst cases can be fatal.

Osteoradionecrosis is an extremely serious concern for patients requiring tooth extraction after radiation therapy of the head or neck and the risk remains for the rest of your life. You should never allow a dentist to extract a tooth after radiation therapy without first consulting a radiation oncologist. Your dentist or oral surgeon may prescribe hyperbaric oxygen therapy in a specialized chamber (like those used to treat deep sea divers) to saturate the bone tissues with oxygen prior to any needed surgery and thus reduce the risk of complications.

Patients who are to receive chemo-radiation therapy should have unsalvageable teeth removed and periodontal health maximized prior to treatment. Many would also benefit from fluoride therapy before during and after chemo and radiation. To repeat the old adage, an ounce of prevention is worth a pound of cure.

Yours for better dental health,

*Rae Dorion, DDS*

64592460

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Dr. Rae Dorion  
Dr. Lee Deimling  
Dr. Jennifer Gurney-Ozog  
Dr. Andrei Ionescu

25 King George Road, Brantford, ON 519-753-7342