

Patients Receiving Radiation to the Head and Neck **ORAL ONCOLOGY CLINIC**

What happens to saliva?

There are substances in saliva that aid in the digestion of food and help protect the teeth from tooth decay. Radiation to the head and neck for treatment of cancer does not have a direct effect on the teeth but can change saliva. The saliva may feel thick and sticky or the mouth may feel dry. When this happens the teeth can become painful and cavities can form quickly.

The changes in saliva will appear within a week or two after starting radiation treatment. Your mouth and throat may also become sore. To reduce problems from changes in saliva and soreness in the mouth, it is important to follow instructions given by dental and medical professionals.

How can I reduce problems in my mouth?

Keep your teeth as clean as possible. Many more bacteria and germs can cause tooth decay and infections in a mouth with little to no saliva. Therefore, it is important that you brush with a soft toothbrush and clean between the teeth as instructed by the dental professional at least two times per day. You should also have your teeth professionally checked and cleaned every 3 or 4 months.

Use fluoride in custom gel trays. Studies on the use of fluoride in custom made gel trays show a reduction in tooth breakdown. From impressions taken of your teeth clear plastic custom gel trays are made. Once daily, place a small amount of fluoride gel in each tray. Put enough gel in the tray to cover the teeth. If gel over flows from tray when placed in your mouth, you have put too much gel in the tray. Wear the trays for one minute. After you remove the trays from your mouth rinse them with cool water and let them air dry.

Treatment of sore mouth. Your mouth may become too painful to clean during radiation treatment. If this happens, contact the dental clinic. The staff will help you with methods of

dealing with the discomfort by suggesting easier ways to keep your teeth clean. They can also recommend rinses that help relieve pain. Your doctor can also help with this problem.

Care of dry mouth. Most people find sipping water from a bottle is the best method to help moisten their mouth. Chewing sugarless gum or sucking on sugarless hard candies may help stimulate saliva. Avoid frequent eating of soft carbohydrate foods and drinks with sugar or honey as these can cause tooth breakdown. You should brush your teeth after every meal. If you have thick, sticky saliva in your mouth, rinse with a mixture of baking soda, salt and water (1/2 tsp. baking soda, 1/4 tsp. salt, and 500 ml water).

Visit a dentist regularly. Dry mouth can be permanent. How dry depends on the area of radiation, the amount of radiation, and the person. Therefore, the problems caused by dry mouth may also be life long. Regular visits to a dentist are important to help keep your teeth and gums as healthy as possible. Your dental professional will tell you how often you should see them. They will also advise you how to best take care of your teeth and gums. If your teeth become sensitive or you have any concerns with your mouth, you should contact the dental clinic or your dentist.

*** To reduce the risk of tooth break-down, continue to use the fluoride in the custom gel carriers. This will be necessary as long as your mouth remains dry. A dentist will advise you if and when you may discontinue their use.**

Please contact the dental department if:

1. Your custom fluoride gel tray is lost or damaged;
2. The gel makes your gums hurt;
3. The gel tray makes you gag;
4. Your mouth or teeth are painful;
5. If you have any questions about your teeth or mouth.