



Cornerstone Dental Group

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Radiation Therapy to the Head and Neck

Before initiating your radiation therapy, a complete and thorough oral health evaluation should be performed. This is often done with the dental consultant with the BC Cancer Agency. A comprehensive dental examination, including select radiographs, should be done to eliminate any potential problems that could complicate your therapy. All essential treatment, such as elimination of active decay, elimination of any dental abscesses and periodontal therapy, should be completed. Any non-essential treatment can be left until after therapy has been completed. It is essential to maintain good levels of oral hygiene and minimize alcohol and tobacco use during and following your therapy. Radiation therapy is associated with various side effects that may vary depending on the type and location of your treatment. Listed below are the more common effects you can expect.

During Treatment

Loss of Taste: A change in taste sensation is common. It may be evident during treatment and may last an estimated 2-4 months following treatment. Taste sensation will usually improve following treatment, returning to normal if adequate saliva flow is present.

Dry Mouth (Xerostomia): reduced function of the salivary glands due to the radiation can result in a dry mouth. The treatment varies depending on the remaining level of salivary gland function. With some residual function, medications like Pilocarpine or even sugarless gum can stimulate the glands to increase saliva production. Without salivary gland function, saliva replacements such as Oral Balance Gel or Mouth Kote can be used. Many store-brand rinses contain alcohol or hydrogen peroxide, which should be avoided because of their drying and irritating effects on the tissues.

Oral Infections: In many radiation therapy patients, the fungus Candidiasis is problematic in the mouth. Despite its unpleasant flavor, Nystatin is commonly used as a rinse, but a systemic antifungal such as Fluconazole can be used for more severe infections. For patients that have viral infections such as Herpes Simplex, Acyclovir is recommended for both prophylaxis and treatment. For many non-specific infections, 0.12% Chlorhexidine Gluconate (Peridex) is often recommended for its residual antifungal and antibacterial properties.

Difficulty Opening (Trismus): Often following radiation therapy, there is some degree of difficulty with opening. This is due to multiple changes to the muscles used in chewing. Daily jaw exercises involving stretching of the muscles may limit the severity of the trismus.

Increase in Dental Decay: Due to the decrease in saliva, the mouth is commonly dry, increasing the susceptibility to dental caries. Patients should apply a 1.1% fluoride gel daily (for at least 5 minutes) using a custom-fitted tray if possible. High-potency fluoride brush-on gels and toothpaste (PreviDent) may be used as an alternative to the trays.

Decreased Healing: Radiation therapy causes many irreversible changes in the body, such as decreased vascularity, which delays the healing response.

For more information, contact the BC Cancer Agency at www.bccancer.bc.ca.

Thank you, and if there are any questions or concerns, please don't hesitate to contact the office.