# Oral Care for Cancer Patients Guidelines

## Questions to Ask / Necessary Information

- Have you received treatment of chemotherapy/radiation/ hematopoietic stem cell transplant? Or will you be and when?
- What type of cancer do you have?
- Has the cancer spread to other regions of your body?
- Have you ever had a recurrence?
- Do you have trouble moving your jaw or swallowing?
- Do you experience any oral pain/sensitivity?
- Do you experience excessive dry mouth throughout the day or feel like you have little saliva?
- Have you received intravenous bisphosphonate therapy?
- If the patient wears dentures- Do your dentures fit?
- Do you smoke? How often? Do you drink alcohol? How much?

## Risk for Medical Emergency

- Risk of infection if absolute neutrophil count (ANC) is too low (<1000/mm^3)
- Risk of bleeding
- Risk of osteonecrosis from treatment with a bisphosphonate/ exposed bone

## Pertinent Laboratory Information

- No laboratory tests are pathognomonic or diagnostic of oral cancer (usually diagnosed by incisional or excisional biopsies of lesions within the oral cavity);
- **For patients who are undergoing chemotherapy, currently on maintenance or hematopoietic stem cell transplant patient:** CBC with differential (ANC and platelets), PT, PTT to be reviewed prior to treatment. These values will indicate if the patient is able to undergo certain types of treatment and if not, certain measures can be taken to bring the patient up to a level to receive proper treatment.
- **Patients who receive head and neck radiotherapy:** the total dose of radiation, fraction size (daily dose) and port size (field of radiation)

## Management For Dental Treatment

- Dental considerations before Chemo/radiation:
  - A pretreatment oral evaluation is recommended for all cancer patients before the initiation of cancer therapy
  - Prepare your patient before chemotherapy or radiation treatment:
    2. Information about diet modifications and the expected oral complication of treatment. (Patients who will be retaining their teeth and undergoing head and neck radiation therapy must be informed concerning the problems associated with decreased salivary function, which includes xerostomia and increased risk of oral infections, including radiation caries, and osteoradionecrosis.)
    3. All symptomatic non-vital teeth should be endodontically treated at least 1 week before initiation of head and neck radiation or chemotherapy.
    4. Elimination of all sources of irritation and infection
5. Extractions: teeth with PD >5mm, teeth with periapical inflammation, broken down teeth, partially erupted or nonfunctional teeth in patients non-compliant with oral hygiene. **Extractions should be performed** at least 7 days before chemotherapy starts and at least 2 wks (ideally 3 wks) before initiation of radiotherapy.

6. Careful follow-up is particularly important in patients with oral cancer, who are at increased risk for a second primary cancer.

- **Dental considerations during Chemo/radiation:**
  - No elective dental treatments during this period.
  - Any dental treatment should be discussed with the cancer management team prior to actual dental treatment.
  - Chemotherapy may need to be suspended so that infection can be managed:
    - use perioperative antibiotics when ANC is too low (<1000/mm^3) or WBC is less than 2,000 mm^3
    - transfusion is needed if platelet count is <30,000/mm^3
  - Use caution with aspirin or other NSAIDS for pain as they may interfere with platelet function.

- **Manage oral complication during chemotherapy:**
  Nausea and vomiting, mucositis and taste alteration starts about second week, oral pain, secondary infections, bleeding and hypersensitive teeth.

- **Manage oral complication during radiotherapy:**
  Nausea and vomiting, mucositis and taste alteration starts about second week, oral pain, secondary infections, and xerostomia. Later onset: radiation carries, trismus, osteoradionecrosis, pulpal pain and necrosis.

- **Postoperative Management**
  - Provide antibiotic prophylaxis if active infection is present
  - If patients receiving head and neck radiation therapy develop oral complications after treatment:
    - **Mucositis**
      - Mouth rinse (1. Salt plus sodium bicarbonate, 2. Elixir of diphenhydramine (Benadryl) or viscous lidocaine 0.5% in Milk of Magnesia, Kaopectate, or sucralfate, 3. Chlorhexidine 0.12%
      - Anti-inflammatory: topical steroids
      - Protectants: Orabase
      - Avoid tobacco, alcohol, carbonated drinks
      - Soft diet, maintain hydration
      - Consider topical and systemic antimicrobials if severe
    - **Xerostomia**
      - Sugarless lemon drops, sorbitol-based chewing gum, buffered solution of glycerine and water, salivary substitutes,
      - Use humidifier, vaporizer
      - Cholinergic agonists can stimulate the remaining functional salivary tissue (pilocarpine and Cevimeline)

- **Radiation Caries**
  - Educate patient concerning the risks and motivate to maintain optimum oral hygiene
  - Custom trays for the daily application of fluoride OR 1x per day application of 5000ppm fluoride (PrevDent) toothpaste
Frequent dental recall  
Patient compliance confirmed by monthly recall during first year  
Restoration for early carious lesions  
• Secondary Infection  
  • Culture, cytologic study, antibiotics, antifungal agents, antiviral agents  
• Sensitivity of Teeth  
  • Topical fluorides  
• Loss of taste  
  • Assure sense of smell is intact  
  • Zinc supplementation  
• Osteoradionecrosis  
  • Prevention – smooth rough edges  
  • CHX rinse 2-4 times day  
  • Pain management  
  • Caution with surgery - obtain information regarding the field of radiation and total dosage prior surgical procedure and determine if hyperbaric oxygen therapy is indicated.  
• Muscular Dysfunction  
  • Use of tongue blades to help retain maximum opening of jaws and access to oral cavity

Oral Manifestations

• Mucositis  
• GVHD  
• Infection  
• Salivary gland dysfunction  
• Taste dysfunction  
• Trismus  
• Necrosis of pulp  
• Bone necrosis  
• Ulceration  
• Radiation caries

References

http://www.nidcr.nih.gov/oralhealth/Topics/CancerTreatment/ReferenceGuideforOncologyPatients.htm  