

# Cancer Care Oral Mucositis Managing Oral Care After Radiation or Chemotherapy



# Halton Region Health Department Mission Statement

Together with the Halton community, the Health Department works to achieve the best possible health for all.

# Opening Comments



## Note

All treatment guidelines must be approved by the individual's physician and oncology care team

# What is Mucositis?

- Mucositis refers to the breakdown of mouth tissues
- It can range in severity from a red sore mouth and gums to open sores in the mouth
- Chemotherapy and radiation therapy kill not only cancer cells, but other rapidly dividing cells including the lining of the mouth and throat
- Oral mucositis leads to several problems:
  - pain
  - nutritional problems / inability to eat
  - increased risk of infection due to open sores in the mucosa

# What are the Signs and Symptoms of Mucositis?

- Red, shiny, or swollen mouth and gums
- Blood in the mouth
- Sores in the mouth or on the gums or tongue
- Soreness or pain in the mouth or throat
- Difficulty swallowing or talking
- Feeling of dryness, mild burning, or pain when eating food
- Soft, whitish patches or pus in the mouth or on the tongue
- Increased mucus or thicker saliva in the mouth

# What are the Common Side Effects of Radiation or Chemotherapy

- Reduced resistance to bacterial, viral or fungal infections which allows them to become opportunistic
- Dry mouth/ Altered taste sensations – including a burning sensation
- Sore/ stiff jaw
- Damage to tooth enamel
- Swallowing difficulties

# Who Gets Mucositis?

- 40% percent or more of patients who receive chemotherapy will develop some degree of mucositis.
- Patients receiving radiation to the head, neck, and chest areas, patients who undergo bone marrow or stem cell transplant, are at a greater risk ( 80%) of developing a mucositis.

## **NOTE**

Certain chemotherapy agents are more likely to cause this side effect.

# What Does it Look Like ?



Mucositis affecting the buccal tissues and tongue



Photos courtesy OncoLink  
Abramson Cancer Centre  
University of Pennsylvania

# What Does it Look Like?



Secondary Candida Infection

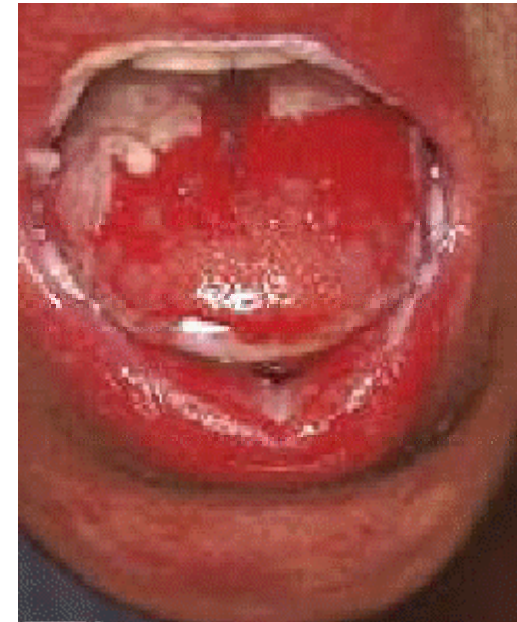


Figura 3. Mucositis aguda por quimioterapia. A diferencia de la mucositis por radioterapia, la afectación mucosa incluye toda la mucosa de la cavidad oral.

Photos courtesy of OncoLink  
Abramson Cancer Centre  
University of Pennsylvania

# What Early Intervention Strategies Should the Health Team Follow?

- The team should begin care planning and intervention strategies prior to the individual noting pain, or staff notice sores, white patches, pus or bleeding, in the mouth, tongue or surrounding tissues
- Patients receiving radiation or chemotherapy therapy to the chest/head/neck area should have their mouths checked daily for redness, sores, or signs of infection
- If the individual develops a fever (temperature greater than 100.4) with some or all of the above side effects implement protocols as soon as possible

# Pain Control

- Cryotherapy - sucking on ice chips has some effect on pain management
- Mucosal protectants work by coating the mucosa, forming a protective barrier for exposed nerve endings.
- There are some drugs that protect against the damage to the mucosa. They have demonstrated that they reduce dry mouth and may prevent mouth sores
- Other agents that have been used include:
  - capsaicin (derived from chili peppers),
  - glutamine,
  - rostaglandin E2,
  - Vitamin E,
  - sucralfate,
  - allopurinol mouthwash.

# Oral Care Products/ Protocols

## Do's

- Minimum 2x to max. 6x per day - lips moisturized (Non- petroleum products)
- Minimum 2x to max. 6x per day – use a dry mouth product
- Minimum 2x to max. 4x per day - rinse mouth before and after meals and at bedtime with:
  - saline solution
  - soda water
  - non- alcohol fluoride rinse (depending on severity )
- Minimum 2x daily – Use a soft-bristle (ultra -soft) toothbrush after meals and at bedtime. If you are assisting with the oral care use a patting motion vs. traditional brushing methods. Use mild gel products, water, or non- alcohol mouthwash as a cleaning agent
- For swallowing difficulties use a moist disposable cloth or gauze (4x4) to help remove debris

# Oral Care Products/Protocols

## Don'ts

**Avoid oral care products that irritate the mouth and gums:**

- No mouthwashes with alcohol
- No dental floss with platelet counts below 40,000
- No lemon or glycerine swabs,
- No hard/medium bristled toothbrushes
- No petroleum based products for lip care (can promote infection)

# Denture Tips

- Remove whenever possible to expose soft tissues to air
- Loose fitting dentures can irritate the tissues and should not be worn
- Individuals should not wear dentures if mouth sores are severe

# Nutritional and Lifestyle Interventions

- Increase fluid intake
- Include foods high in protein in the diet
- Avoid hot, spicy or acidic foods, alcohol, hard or coarse foods (crusty bread, chips, crackers)
- Individuals should not smoke cigarettes, cigars or pipes
- Individuals should not use smokeless tobacco (chewing tobacco, snuff)

# Over the Counter Products for Optimal Oral Health



Mild tooth paste



Ultra Soft Toothbrush



Dry Mouth Products



Non- alcohol mouth wash

# Reference Sources

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- Sonis ST. Oral mucositis in cancer therapy. *The Journal of Supportive Oncology*. 2(6 Suppl 3):3-8, Nov 2004
- Worthington HV. Clarkson JE. Eden OB. Interventions for treating oral mucositis for patients with cancer receiving treatment. *Cochrane Database of Systematic Reviews*. (2):CD001973, 2004.

# Web Sites

- American Oncology Nursing Association [customer.service@ons.org](mailto:customer.service@ons.org)
- 1. OncoLink Abranson Centre Cancer Centre University of Pennsylvania  
<http://www.oncolink.com>
- 2. Cawley MM. Benson LM. Current trends in managing oral mucositis. Clinical Journal of Oncology Nursing. 9(5):584-92, 2005 Oct. National Cancer Institute website, [www.cancer.gov](http://www.cancer.gov)
- 3. Hartford Centre of Geriatric Nursing Excellence- Oral Health and General Health Issued for the Older Patient <http://www.nursing.upenn.edu>



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