

## XEROSTOMIA

### INTRODUCTION

Xerostomia is a frequent consequence of polypharmacy in the elderly, medically complex patient. The reported prevalence ranges from 14-46%, with a significantly higher prevalence in women. Xerostomia is associated with a variety of conditions that severely diminish the quality of life, including candidiasis, dysgeusia, dysphagia, periodontitis, and caries. This creates a challenge for oral health providers caring for geriatric patients and populations with special needs.

### FACTS FOR PROVIDERS

- Xerostomia
  - Over 500 medications cause it as a side effect
  - Among the most common are:
    - anti-depressants
    - anti-hypertensives
    - anti-psychotics
    - anti-parkinsonian agents
    - anti-inflammatory analgesics
    - antihistamines
    - Anti-cholinergics
    - anxiolytics
    - anticonvulsants
    - anti-spasmodics
    - sedatives
    - decongestants
    - muscle relaxants
    - diuretics
- The risk of xerostomia increases with the number of medications taken
- Dysphagia as a side effect of medication
  - Medications that affect the smooth and striated muscles of the esophagus involved in swallowing may cause dysphagia.
    - Among the most common are benztropine mesylate, oxybutynin, Propantheline, tolterodine
  - Medications that cause xerostomia may interfere with swallowing by impairing a person's ability to move food
  - Antipsychotic/ Neuroleptic medications given for treatment of psychiatric disorders may affect swallowing as many of them produce dry mouth and may cause movement disorders that impact the muscles of the face and tongue which are involved in swallowing.
- Dysphagia as a complication of the therapeutic action of the medication
  - Medications that depress the Central Nervous System (CNS) can decrease awareness and voluntary muscle control that may affect swallowing.
  - These include antiepileptics, benzodiazepines, narcotics, and skeletal muscles relaxants.
- Dysgeusia is a side effect of xerostomia, and can also be caused by many classes of drugs, including lithium, captopril and thyroid medications.

## **Evaluation of Symptoms:**

- 50% of saliva must be lost before symptoms of xerostomia occur
- Four most common complaints:
  - Oral dryness when eating
  - Need to sip liquids to swallow dry foods
  - Difficulty swallowing
  - Perception of too little saliva
  - Burning mouth
- Physical Exam Findings
  - Chronic enlargement, tenderness of major salivary glands
  - Friable oral mucosa
  - Fissured tongue
  - Exam instruments stick to oral mucosa
  - No secretion when palpating salivary ducts
  - Candidiasis, angular cheilitis
  - Dry, cracked lips
  - Aphthous or viral lesions
  - Increased plaque and gingival disease
  - Root caries, demineralization

## **Treatment:**

- Fluoride therapy for caries control
  - 1.1% neutral sodium fluoride gel or dentifrice-5000 ppm prescription
  - 0.2% neutral sodium fluoride rinse -920 ppm prescription –
  - 5% NaF varnish (in office use only)-note that there is no evidence based protocol for interval between applications. Expert opinion indicates 3-6 month intervals.
- Salivary replacement Therapy
  - Artificial saliva
  - Biotene product line (Laclede Pharmaceuticals); toothpaste, gel, rinse, chewing gum
  - Oragel product line (Del Pharmaceuticals, Inc) moisturizing gel and spray, moisturizing toothpaste
  - Prescription medications (pilocarpine, cevimeline); neither are recommended for medication induced xerostomia
- Antifungals
  - Nystatin and triamcinolone for angular cheilitis
  - Candidiasis-nystatin or clotrimazole troches

## **Prevention:**

A thorough medication review with your patient/caregiver and communication with the patient's primary medical provider regarding your mutual patient's symptoms will often result in regimen changes that can improve the oral condition. If changes are not possible, then educating patients/caregivers is an integral part of a health care providers' responsibilities.

## **REFERENCES**

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