



Oral Health: Protecting your Smile Protects your Health

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Oral Health and Older Adults



Oral Health Challenges Faced by Older Adults

The good news: Many older adults are keeping their teeth

The bad news: Teeth require meticulous hygiene

Plaque Diseases: Two Types

1. Caries (tooth decay)
2. Periodontal Disease (gum inflammation)
leads to exposed root surfaces



Plaque Diseases

- Plaque development inhibited by daily brushing and flossing.
 - Both actions require manual dexterity that is often lost as people age
 - Strategies include using floss holders, rinsing twice daily with fluoride rinse, high fluoride toothpaste, regular dentist visits, and sometimes help from others
- Periodontal disease
 - 95% of people over the age of 65 have some loss of periodontal attachment, causing gingival recession and root exposure
 - Those teeth are vulnerable to root surface caries

Xerostomia (chronic dry mouth)

- Caused by lack of salivary flow
- Highly variable between people
 - Less than 1 ml of saliva/minute for 5 minute test is diagnostic
- Affects more than 70% of 65+ population
- Signs: ropy saliva, chapped lips, fissuring of tongue, oral fungal infections, lesions at corner of mouth



Xerostomia- Causes

Medications, tobacco use, eating disorders, radiation or chemotherapy, old age

Specific Medications include:

- Anti-cholinergics, anti-histamines
- Anti-depressants
- Anti-hypertensives
- Diuretics
- Anxiolytics



Xerostomia- Symptoms

- Burning sensation
- Sore tongue
- Generalized oral soreness
- Difficulty swallowing
- Impaired speech
- Recurrent oral abrasions/ulcerations



Xerostomia- Treatment

- Increase water intake: small, frequent sips
- Salivary stimulants (sugar free candy or gum)
- Saliva substitutes (Oasis Mouth Moisturizer)
- Rinse with sodium bicarbonate (1 tsp baking soda with 8 oz water)



Oral Cancer

Squamous cell carcinoma:

- Prevalence increases over age 40
- Males 3x as likely as females
- Responds well to early diagnosis
- Common sites:
 - lower lip
 - palate
 - floor of mouth
 - tongue
 - tonsillar pillar



Obstacles to Optimal Oral Health

- Medicare was not designed to provide for routine dental care
- Use of dentures does not eliminate the need for good oral hygiene
- Nursing home staff have poor training in oral health examinations
- Dentists are less likely to treat patients in an institutionalized setting



Physical Impediments to Oral Hygiene

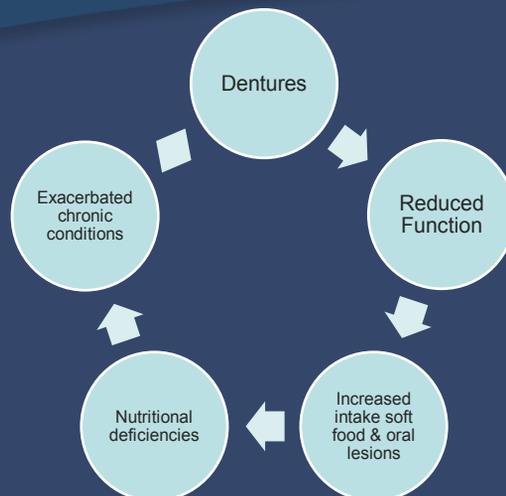
- Arthritis
- Parkinson's Disease
- Dementia
- Loss of tactile sensation
- Loss of proprioception
- Loss of fine motor control
- Reduced visual capacity



Oral-Systemic Health Interactions

- Nutritional deficiencies due to oral health problems exacerbates existing chronic diseases
- Periodontal disease strongly correlated with:
 - Cardiovascular disease
 - Diabetes
 - Aspiration pneumonia

Oral Health Contributes to Systemic Health



Special Concerns for Diabetics

- Diabetics with oral lesions have more difficulties with glycemic control
- High prevalence of Candidiasis, especially among those with dentures and partials



Dementia

Oral hygiene can be difficult to maintain

- Communication difficult in cognitively impaired people
- Most dental needs are never addressed
- Other problem behaviors may be a result of oral pain
- Dementia patients experience:
 - Reduced salivary flow
 - High plaque levels
 - Increased soft tissue lesions
 - Decreased use of dentures
 - Loss of muscle tonicity and control, which leads to loss of denture control, impaired chewing, sleep apnea, and gastric reflux



Dentures Create Special Concerns

- Reduced chewing to about 20% of normal
- Alveolar bone loss over time leading to denture instability
- Drop in neuromuscular and sensory function
- Reduced salivary efficiency
- Decreased tactile sensation
- Decreased taste capacity
- Increased incidence of oral lesions



Dentures may Compound Problems

- Oral discomfort
 - Nutritional deficits (more soft, processed foods consumed)
 - Poor food choices exacerbate systemic conditions (gastrointestinal reflux, osteoporosis)



A Word about Radiation Therapy

- Comprehensive oral care prior to radiation therapy involving the head/neck is essential.
- The risk of osteo-radio-necrosis is high after radiation therapy and increases over time.



How Health Care Providers can Help

- Counseling = 5 As
 1. Assess
 2. Advise
 3. Agree
 4. Assist
 5. Arrange
- Refer patients to dental providers when necessary
- Write prescriptions for oral health cleaning and care for nursing home residents



Resources

- Sjögren et al., JAGS 56:2124-2130, 2008
- Quandt et al., The Gerontologist Advance Access published July 2, 2009
- The Kayser-Jones Brief Oral Health Status Examination (BOHSE) – Try This #18
- Nestlé Mini Nutritional Assessment (MNA)
http://www.mna-elderly.com/mna_forms.html