Oral Health Cases: You Be the Clinician!

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Oral Health Care

- 95% of all Americans are affected by oral disease
- Oral cancer is more common than leukemia, melanoma, Hodgkin’s disease and cancers of the brain, stomach, thyroid gland, ovaries, or cervix.

Source: The NCCPA Health Foundation
Oral Health Care

- Up to 1.65 million emergency room visits at an estimated cost of 1.7 billion could be saved if PAs/NPs were equipped to recognize oral health as part of overall health.

Source: The NCCPA Health Foundation
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Relevant Anatomy & Physical Examinations

- Oral cavity extends from the vermillion border of the lips to the junction of the hard and soft palates in the roof of the mouth superiorly, and to the circumvallate papillae on the tongue
  - Lips,
  - Commissures,
  - Lingual tonsil,
  - Gums,
  - Floor of the mouth,
  - Hard palate,
  - Buccal mucosa,
  - Retromolar trigone, and
  - Most of the tongue.

Source: https://emedicine.medscape.com/article/1491418-overview
Relevant Anatomy & Physical Examinations

• Oral cavity can be physically examined in a variety of approaches.
• A general examination should contain:
  • Extra oral
    • Inspect the head & neck
    • Palpate cervical lymph nodes and salivary glands
  • Lips
    • Inspect and palpate inner and outer surfaces of the upper and lower lip
  • Buccal mucosa
    • Inspect and palpate buccal mucosa and cheek
    • Inspect and palpate parotid duct to express saliva
  • Gingival and alveolar ridge
    • Inspect and palpate gingival and alveolar ridge on facial and lingual aspects

Source: https://emedicine.medscape.com/article/1491418-overview
Relevant Anatomy & Physical Examinations

- **Tongue**
  - Inspect and palpate dorsal and ventral surfaces with accompanying retraction of the tongue with gauze
  - Inspect and palpate lateral borders from anterior to posterior with manual retraction
- **Floor of the mouth**
  - Inspect and palpate floor of the mouth
  - Inspect and palpate submandibular ducts to express saliva
- **Hard palate**
  - Inspect and palpate
- **Soft palate and oro pharynx**
  - Depress the dorsal surface of the tongue and inspect soft palate and anterior oropharynx
- **Salivary glands**
  - Palpate the parotid, submandibular, sublingual, and minor salivary glands. Ensure clear salivary flow.

Source: https://emedicine.Medscape.com/article/1491418-overview

Video on Oral Cavity Examination can be found at https://www.youtube.com/watch?v=ordrKiGbqgc
The Mouth’s Role in the Body

• Integral to Systemic Health
  • Productivity
  • Quality of life

• Portal (Pro’s)
  • Entryway of nutrition
  • Source of communication, pleasure, social interaction, and cultural facial and dental esthetics
The Mouth’s Role in the Body

- Portal (Con’s)
  - Infection
  - Inflammation
Local Infections

- Untreated oral infection can spread and cause:
  - Intraoral abscesses
  - Facial cellulitis
  - Sinusitis
  - Brain abscesses
  - Airway compromise (infection in fascial planes of the neck)
Systemic Infections

- **Bacteremia/Sepsis**
  - Infection of tooth is central next to blood supply to the body
  - Higher risk in patients with valve disease

- **Respiratory**
  - Aspirations of oral bacteria is associated with pneumonia, particularly in bedridden and hospitalized patients
Inflammation

- Starts in the mouth-bacteria, plaque, inflamed gums and ligaments
- Systemic response-macrophages, neutrophils
- Affects blood vessels, joints, glucose control
- Rheumatoid arthritis, heart disease and diabetes all are worsened by uncontrolled periodontitis
Treating Gum Disease Equals Annual Cost Savings

United Concordia's landmark Oral Health Study shows that annual cost savings of $3,291, $2,956, $1,029, $3,964 and $2,430 are possible when individuals with diabetes, heart disease, cerebrovascular disease (stroke), rheumatoid arthritis and pregnancy are treated for gum disease.

* 3-year average of $1,814 in savings from reduced hospital and office visits begins in the first year of periodontal treatment. Pharmacy savings realized annually after patient receives at least 7 periodontal treatment and/or maintenance visits.
Other Personal/Public costs

- Self esteem
  - Affects employment, friendships, and well being
- Morbidity
  - Edentulism before 65 is associated with a 1.5 increased risk of death from all causes
Resources

- Smiles for Life
  (www.smilesforlifeoralhealth.org)
  - 8 modules - online or downloadable
  - Geriatric, pregnancy, urgent care, pediatric

Smiles for Life
A national oral health curriculum
OK, let’s talk about a few cases