

The Patient with an Autoimmune Disease

Diana Stoute, RDA, EDDA, RDH,
BSDH

Learning Objectives

- Describe how autoimmune diseases affect the immune system.
- Identify various types of autoimmune diseases and the identifying symptoms and treatment.
- Plan dental hygiene care modifications for the patient with an autoimmune disease.

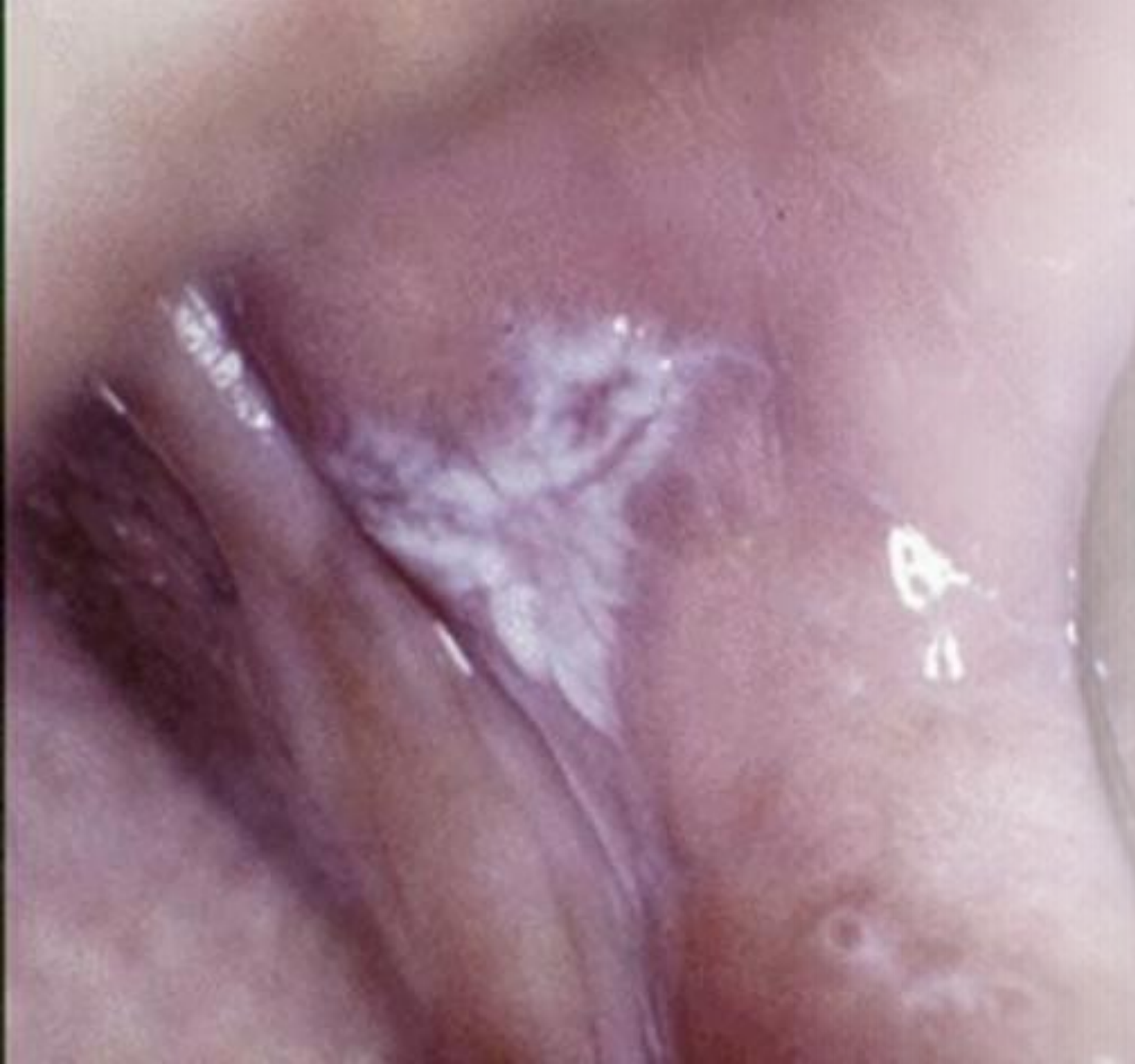
Oral Lichen Planus

- Chronic or recurrent inflammatory disease
 - Affects cheeks, tongue and gingiva
 - Buccal mucosa most common
- Risk of malignant transformation
 - 1.1% cases
- Risk increases after age 40
- Etiology
 - Genetics
 - Systemic diseases
 - Hepatitis B and Hepatitis C
- Periods of remission and flare-ups

Types of Oral Lichen Planus: Reticular

- Wickham striae
 - Mossy, lacy white threads that are slightly raised found on the buccal mucosa



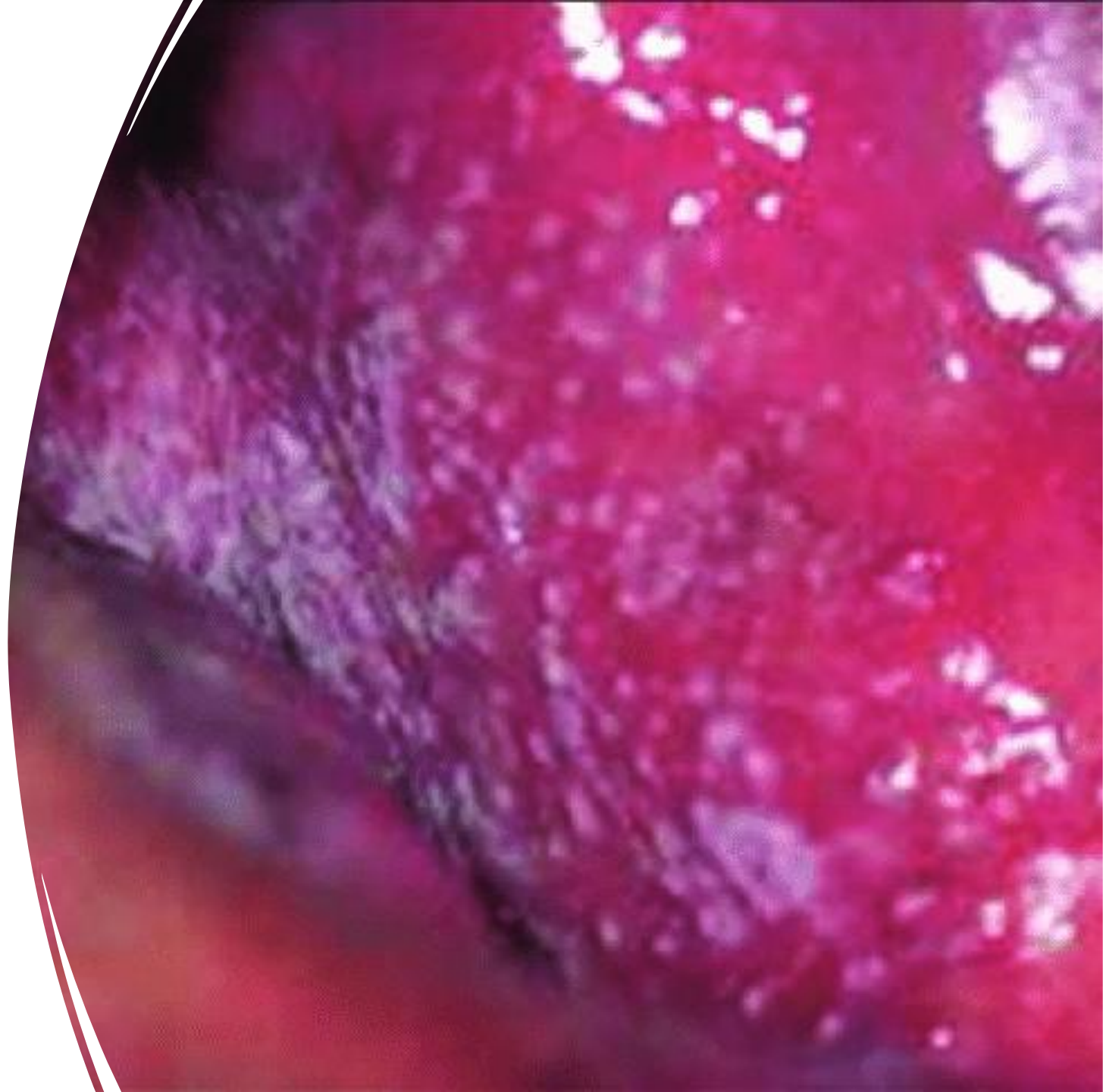


Types of Lichen Planus: Plaque-like white lesions

- Occurs more frequently on dorsal surface of tongue
 - Look like oral leukoplakia

Types of Lichen Planus: Papular

- Appear as papules on the oral mucosa
 - Buccal mucosa





Types of Lichen Planus: Atrophic/Erosive

- May resemble an oral erythroleukoplakia lesion
 - Typically bilateral and symmetric

Types of Lichen Planus: Ulcerative

- Similar to erosive
 - Central ulceration in lesion



Types of Lichen Planus: Bullous

Bulla or separation of oral
epithelium from underlying
connective tissue



Dental Hygiene Care for Oral Lichen Planus

- Avoid aggravating foods
- Lesion may limit biofilm removal
 - Palliative care of viscous lidocaine mouthrinses
- Avoid toothpastes with pyrophosphates
- Avoid mouthrinses with alcohol
- Topical corticosteroids
 - Prednisolone
- Carefully monitored
 - Transformation to oral squamous cell carcinoma



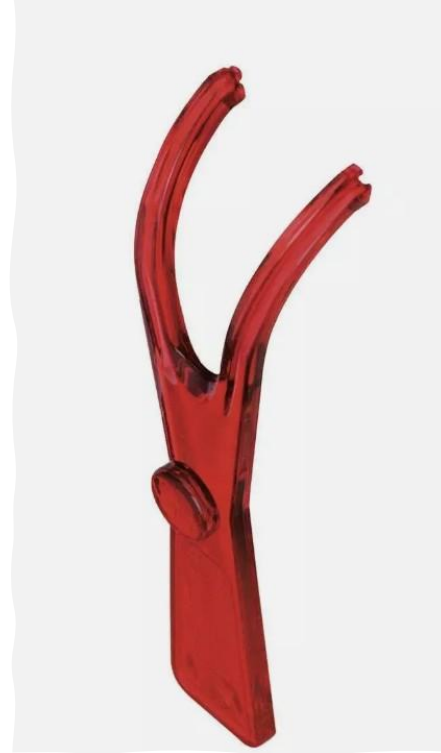
Rheumatoid Arthritis (RA)

- Joint inflammation
 - Destruction of joint
 - Loss of cartilage
- Association with periodontal disease and RA
- Women more commonly affected than men
- Peak incidence around age 50
- *P. gingivalis* may contribute to autoantibody production



Rheumatoid Arthritis Dental Hygiene Care

- Nonsurgical periodontal therapy
- Manual dexterity alterations
 - Electric toothbrushes
 - Floss holders
 - Interdental brushes
 - Tennis ball around toothbrush handle
- Encourage health choices
 - Healthy eating habits
 - Weight management
 - Tobacco cessation



Scleroderma

- Affects connective tissue
 - Skin, blood vessels, heart lungs
 - Kidneys, GI tract and musculoskeletal system
- Fibrosis and vasculopathy



Scleroderma Dental Hygiene Care


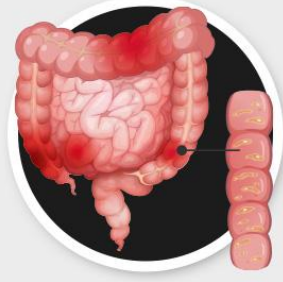

- Limited mouth opening and access
- Prevention is crucial
- Microstomia
- Xerostomia
 - Home fluoride trays
 - Saliva substitutes
 - Xylitol products
 - Avoid alcohol containing products
- Hand weakness and reduced grip



Autoimmune Diseases Affecting the GI Tract

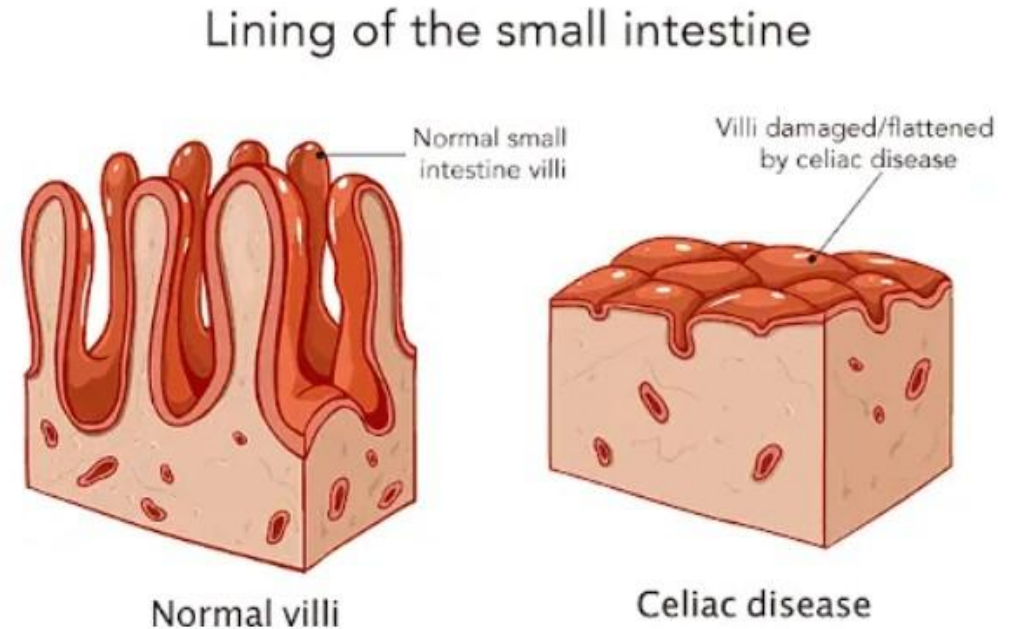
- Affect through organ-specific autoantibody
- Genetic component with environmental factors
- Celiac Disease (CD)
- Inflammatory Bowel Disease (IBDs)
- Crohn's Disease
- Ulcerative Colitis (UC)

IBS VS ULCERATIVE COLITIS VS CROHN'S DISEASE

IBS	Ulcerative Colitis	Crohn's Disease
		
Location: Large intestine.	Location: Only in the colon.	Location: Anywhere in the digestive system, from mouth to anus.
Inflammation: No actual inflammation or damage to tissues.	Inflammation: Just on the inner lining of the colon.	Inflammation: Affects all layers of the bowel wall and can appear in patches.

Celiac Disease

- Damage to the villi of the small intestines
- Chronic malabsorption of nutrients
 - Iron, folic acid, fat-soluble vitamins and B12
- More frequent in women and non-Hispanic whites
- Genetic and environmental predisposition



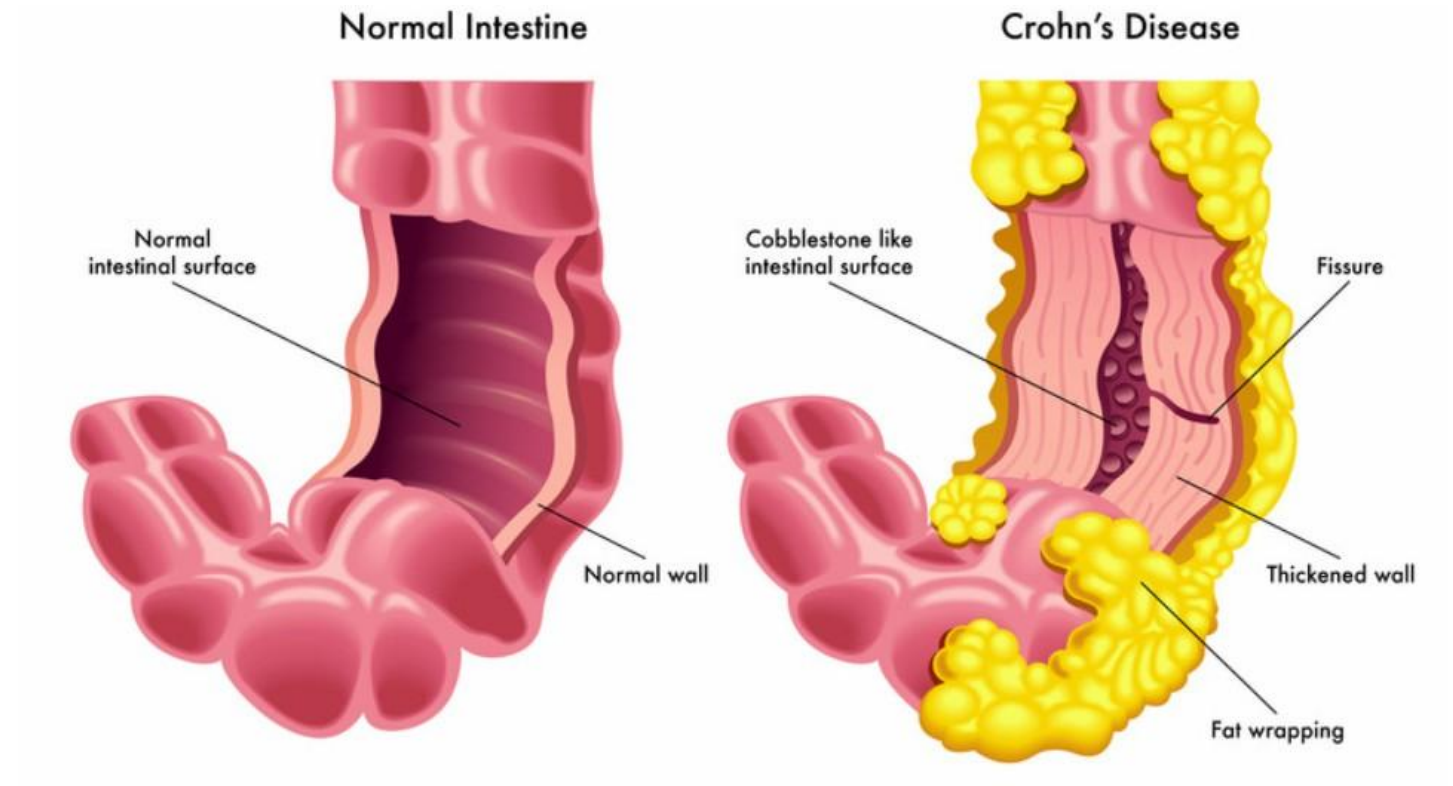
Dental Hygiene Care of Celiac Patients

- Refer children prone to enamel defects and aphthous ulcers
- Angular cheilosis and glossitis
- Delayed growth, tooth eruption and malocclusion
- Use of gluten-free products
- Palliative treatment of oral lesions
- Tobacco cessation programs



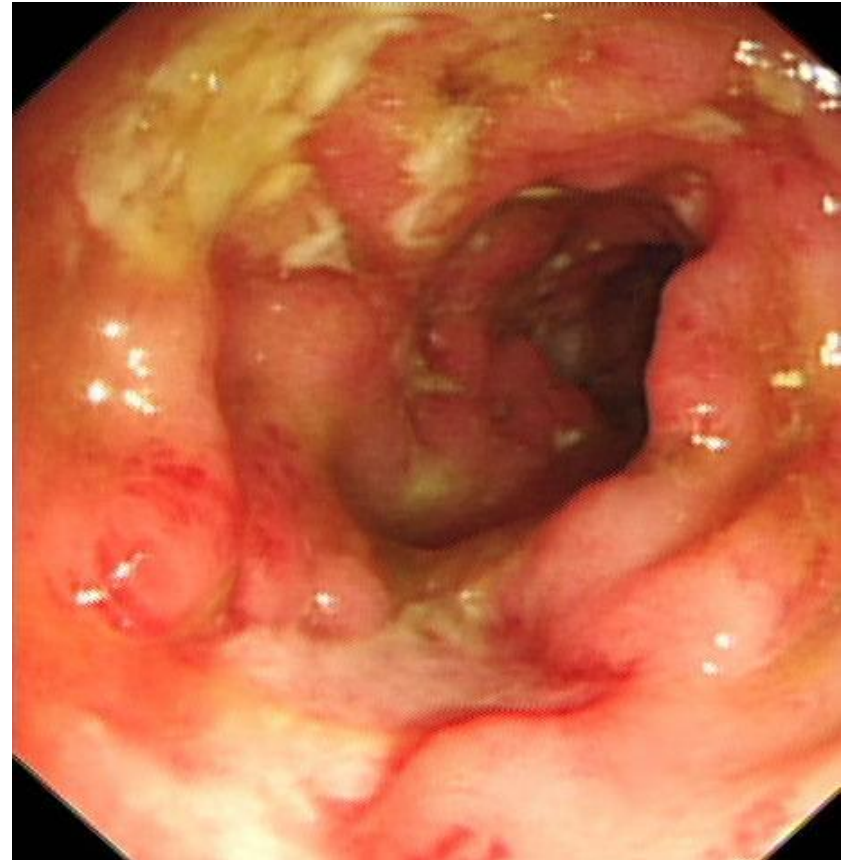
Crohn's Disease

- Chronic, progressive destructive inflammatory condition
 - Impacts any part of GI tract
 - Mouth to anus



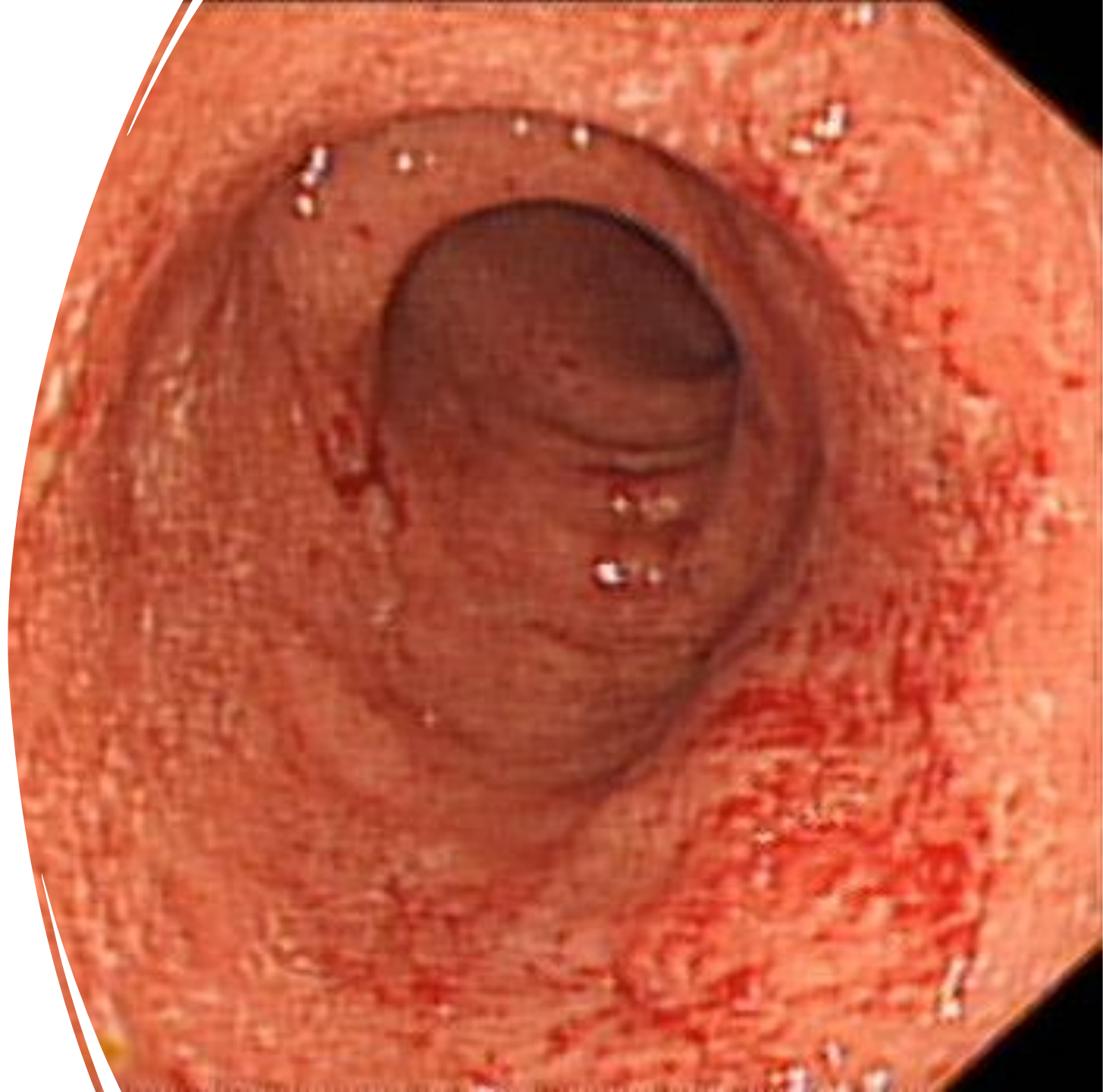
Dental Hygiene Care of Crohn's Patient

- Avoid NSAIDs
- Assist with tobacco cessation
- Referral to mental health specialist
- Work interprofessionally
- Dietary assessment and counseling
- Palliative treatment of oral lesions
- Manage dental biofilm
- Home and office fluorides



Ulcerative Colitis

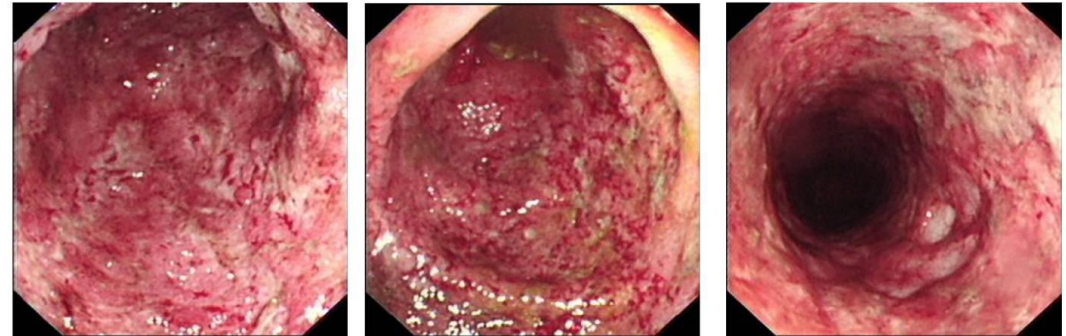
- Autoimmune irritable bowel disease
- Affects primarily the colon



Dental Hygiene Care for UC Patient

- Palliative treatment for oral lesions
- Avoid prescribing NSAIDs
- Education on dental biofilm removal
- Regular recall visits, both periodontal and healthy visits

Ulcerative colitis-inflammation and continuous ulceration throughout the colonic mucosa



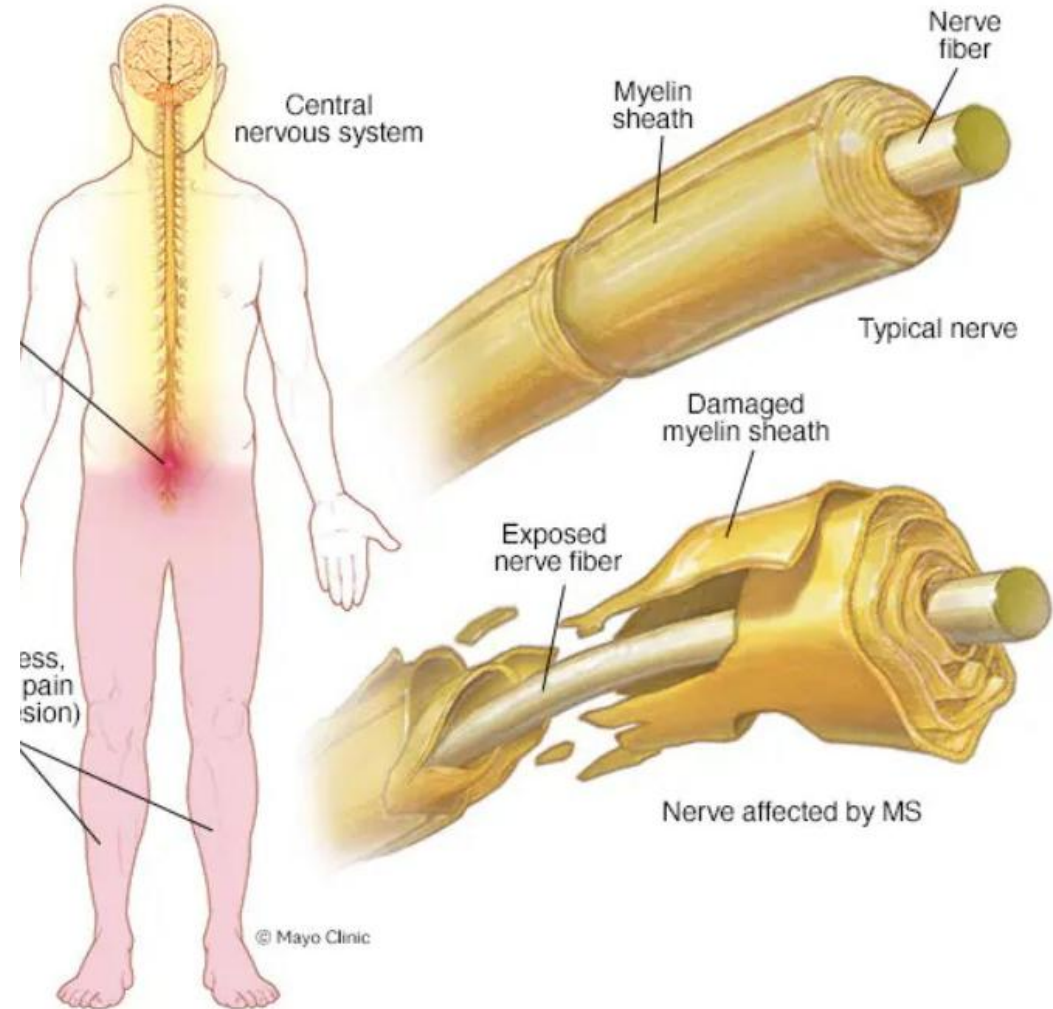


Pyostomatitis Vegetans



Multiple Sclerosis (MS)

- Demyelination of central nervous system
- Progressive disability of motor, sensory, cognitive and emotional changes
- Females are 2x-3x more likely as males



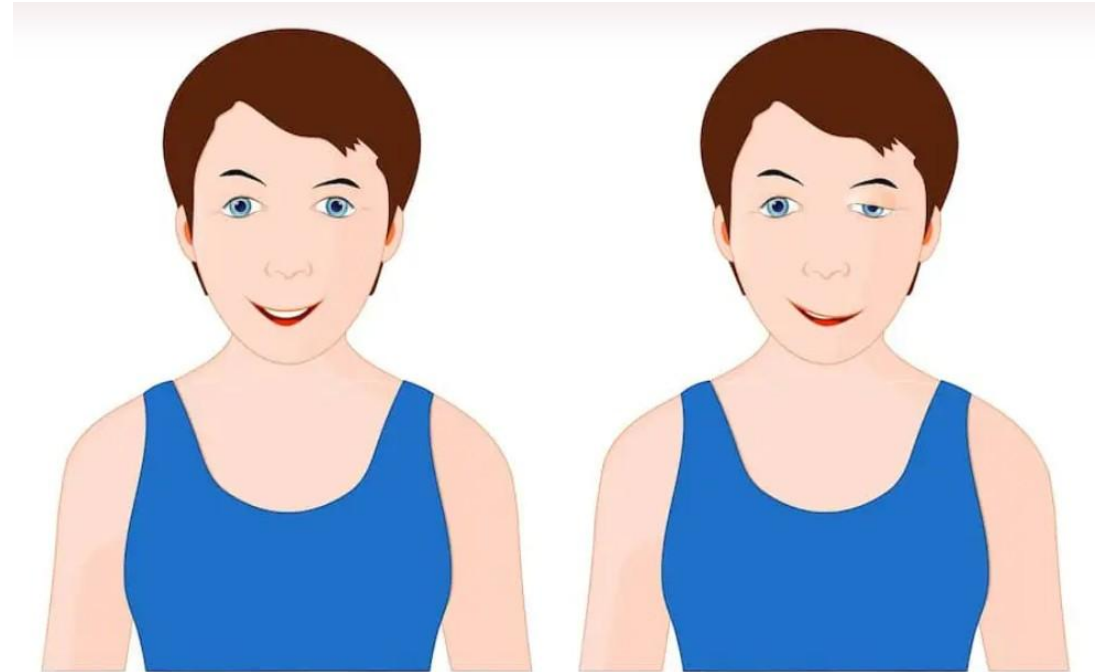
Dental Hygiene Care with MS Patients

- Medical consults or dental clearance
- Ask about white blood cell counts
- Palliative treatment for oral lesions
- Orofacial manifestations
- Individualized oral self-care
 - Look and ask about visual and motor function disturbances
- Prevention based on risk
- Management of oral candidiasis
- More frequent appointments



Myasthenia Gravis

- Autoimmune neuromuscular disease
- Weakness and abnormal fatigue
 - Defective transmission of nerve impulses
- Myasthenic crisis
 - Life-threatening
 - Impacts ability to swallow and respiratory muscles
 - 911 called immediately
 - BLS provided until medical assistance arrives



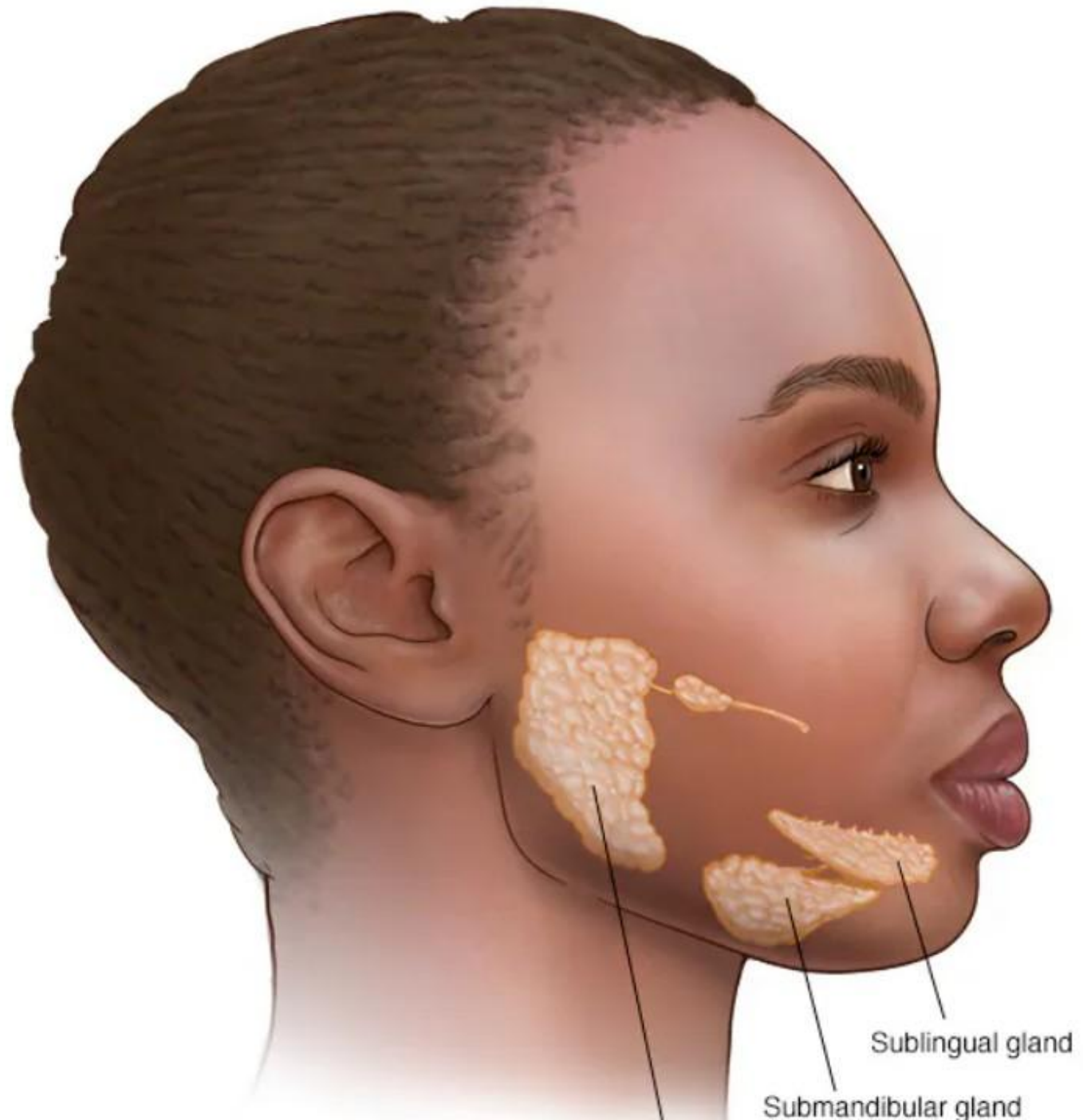
Dental Hygiene Care of Patient with Myasthenia Gravis

- Short morning appointments
- Consult or medical clearance
- Anxiety management strategies
- semi-supine positioning and limited use of water
- Use of bite block
- Allow rest periods
- Patient may have speech difficulties
- Frequently ask about distress or comfort
- Educate on biofilm removal
- Electric toothbrush
- Patient may need to lean on counter when brushing or flossing for support
- More frequent visits depending on oral health and patient needs



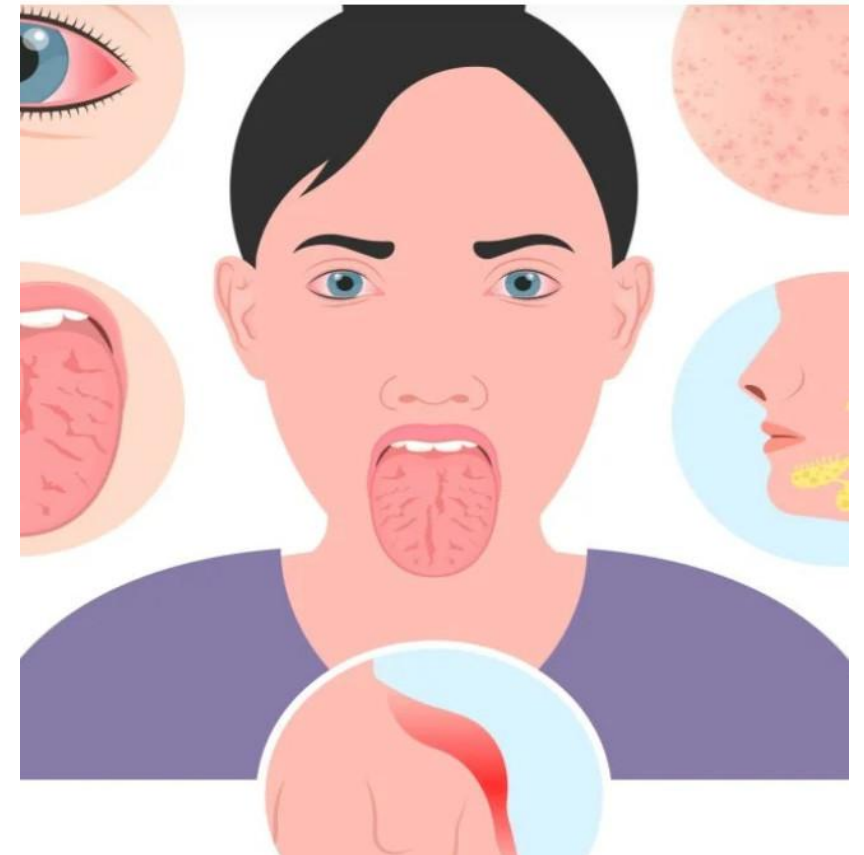
Sjogren's Syndrome

- Autoantibodies attack healthy cells
 - Exocrine glands and other organs
- Exocrine glands
 - Produce moisture for mouth, eyes, nose, throat and skin
- Oral manifestations
 - Increased caries
 - Increased biofilm
 - Oral candidiasis



Dental Hygiene Care of Sjogren's Patient

- Interprofessional care approach
- Oral self-care education
- Assess dietary intake
- Counsel on reducing snacking and fermentable carbs
- Xylitol containing gums, mints, hard candies
- Saliva substitutes and water bottle
- Antifungal mouthrinses
- Home fluoride trays and therapies
- Avoid SLS and pyrophosphates
- Antimicrobial rinses
 - Chlorhexidine
 - Therastom
- Calcium phosphate to reduce caries
- More frequent continuing care appointments



Systemic Lupus Erythematosus

- Widespread inflammation
 - Affect internal organs and glands
 - Tissue destruction and damage
- Oral lesions
 - Oral discoid lesions
 - Petechia-like lesions
 - Gingival bleeding
 - Erosive mucosal lesions



Dental Hygiene Care of Lupus Patient

- Consult and possible medical clearance
- Closely monitor periodontal health
 - Bone loss associated with corticosteroids
- Oral self-care education
 - Management of dental biofilm
 - Management of gingivitis
- Individualized patient preventative services
 - Fluorides
 - Diet counseling
 - Saliva substitutes
- Modify oral care based on mobility and dexterity issues
- Palliative treatment for oral lesions
- Tobacco cessation counseling



Case Study

- Jane Doe, a 55-year-old female, presents with a medical history of Sjögren's syndrome, diagnosed 3 years ago. She reports persistent dry mouth, difficulty swallowing, and recurrent oral infections. She has been experiencing these symptoms since 2019.
- “My mouth feels so dry, and I keep getting cavities. It's hard to eat and I'm worried about my teeth.”
- What are some questions that we may ask this patient?
- What should be documented with this patient in their chart?
- What are some intraoral and extraoral signs and symptoms we may examine?
- What are some diagnoses that we may find in this patient?
- How could this patient be treatment planned to have ultimate preventative oral health?

