# Chronic Diarrhea in Systemic Disease

A comprehensive review for gastroenterologists



Presentation :
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# Definition & Clinical Importance

- Diarrhea lasting >4 weeks
- Major impact on nutrition and quality of life
- Can reflect multisystem pathology
- Requires targeted evaluation

# Classification of Chronic Diarrhea

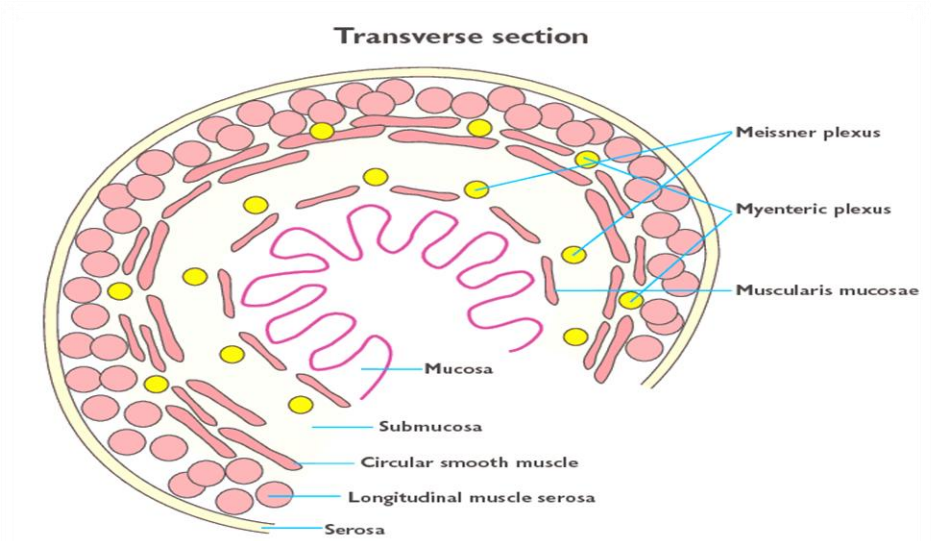
- Watery diarrhea
- Fatty/malabsorptive diarrhea
- Inflammatory diarrhea
- Secretory vs osmotic mechanisms

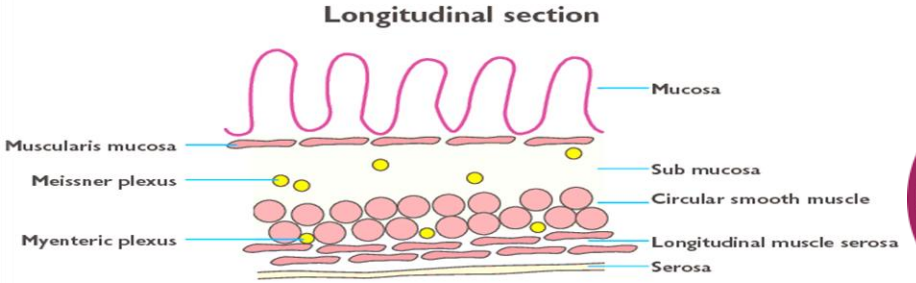
# Approach to Systemic Disease

- Detailed history
- Medication review
- Travel and diet assessment
- Screen for extraintestinal manifestations

# Pathophysiology

- Immune dysregulation
- Autonomic dysfunction
- Malabsorption
- Endocrine and inflammatory mediators



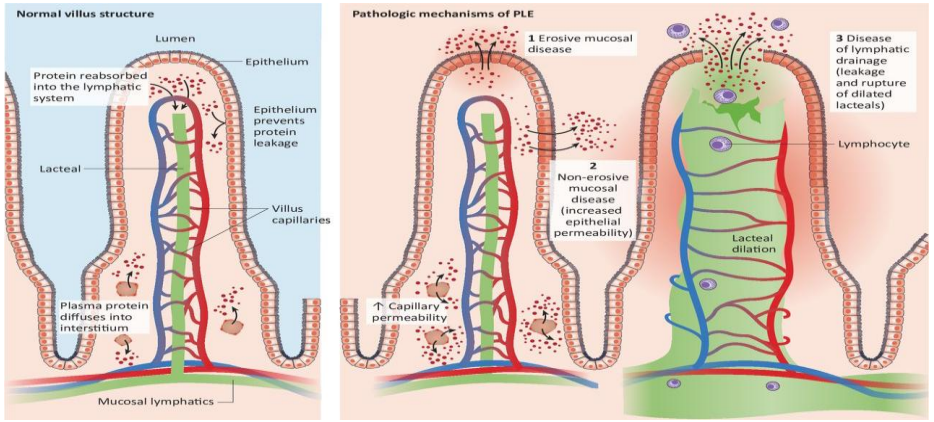



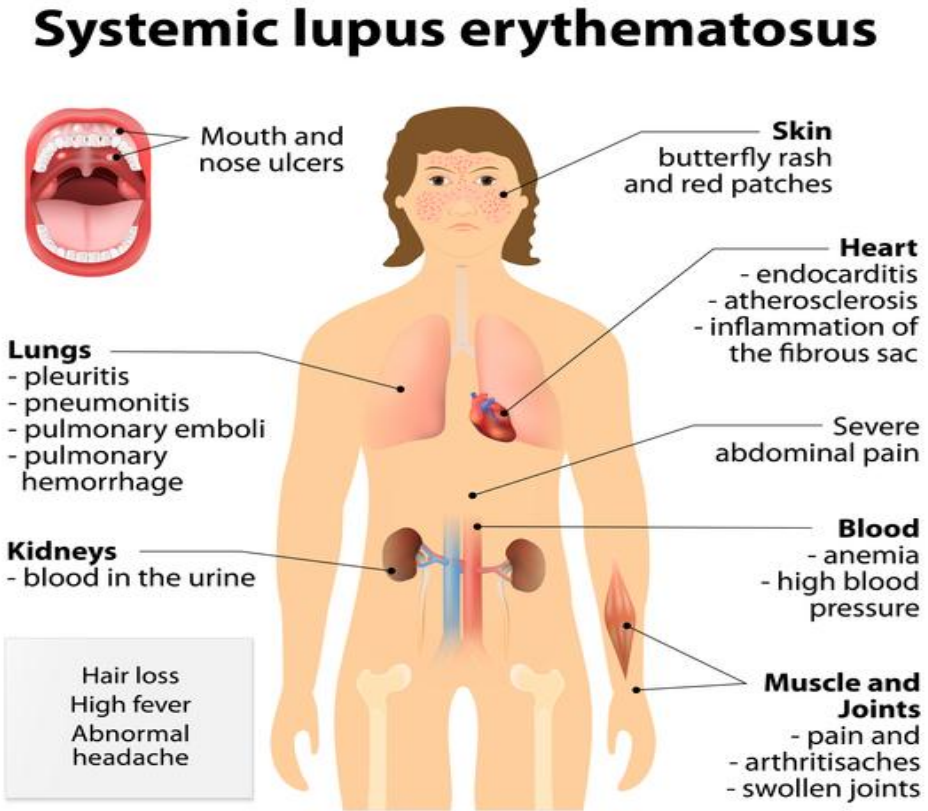
# Autoimmune Disorders

- Common cause of chronic diarrhea
- May involve small bowel or colon
- Associated nutritional deficiencies
- Overlap syndromes common

# Systemic Lupus Erythematosus

- Mesenteric vasculitis
- Protein-losing enteropathy
- Medication-related diarrhea
- Risk of opportunistic infections



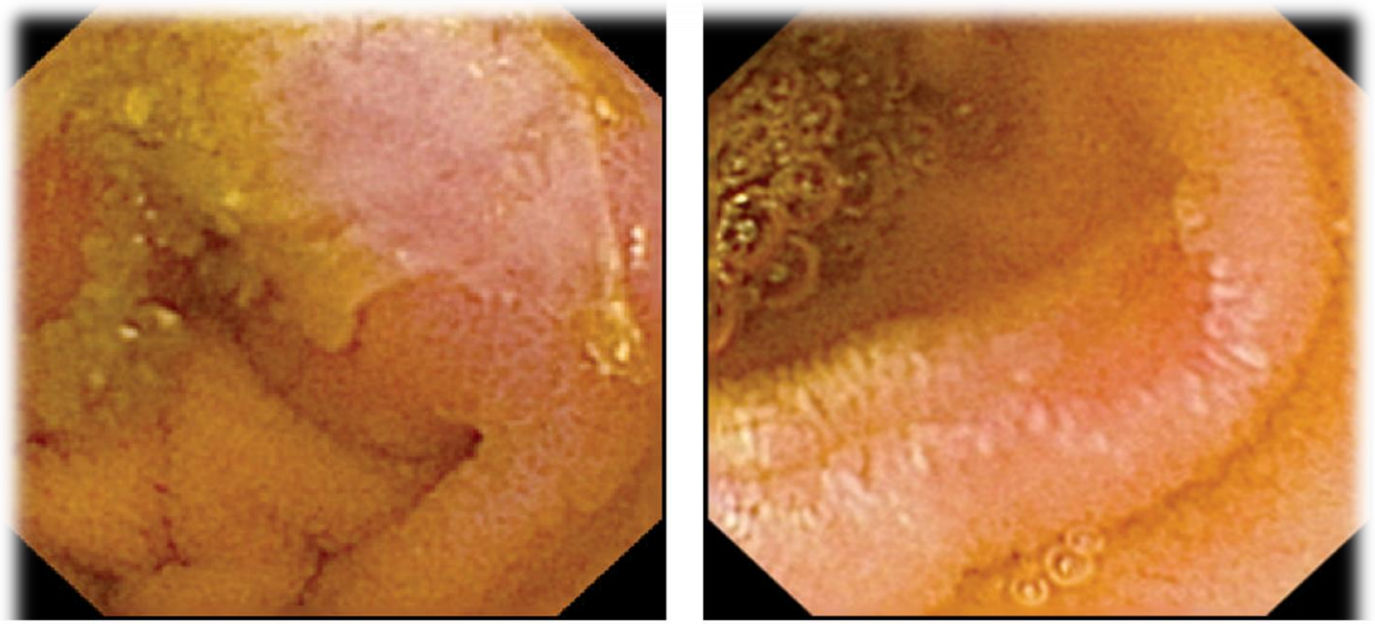
# Systemic Sclerosis

- Intestinal dysmotility
- Small intestinal bacterial overgrowth
- Malabsorption and pseudo-obstruction
- Management challenges



# Rheumatoid Arthritis

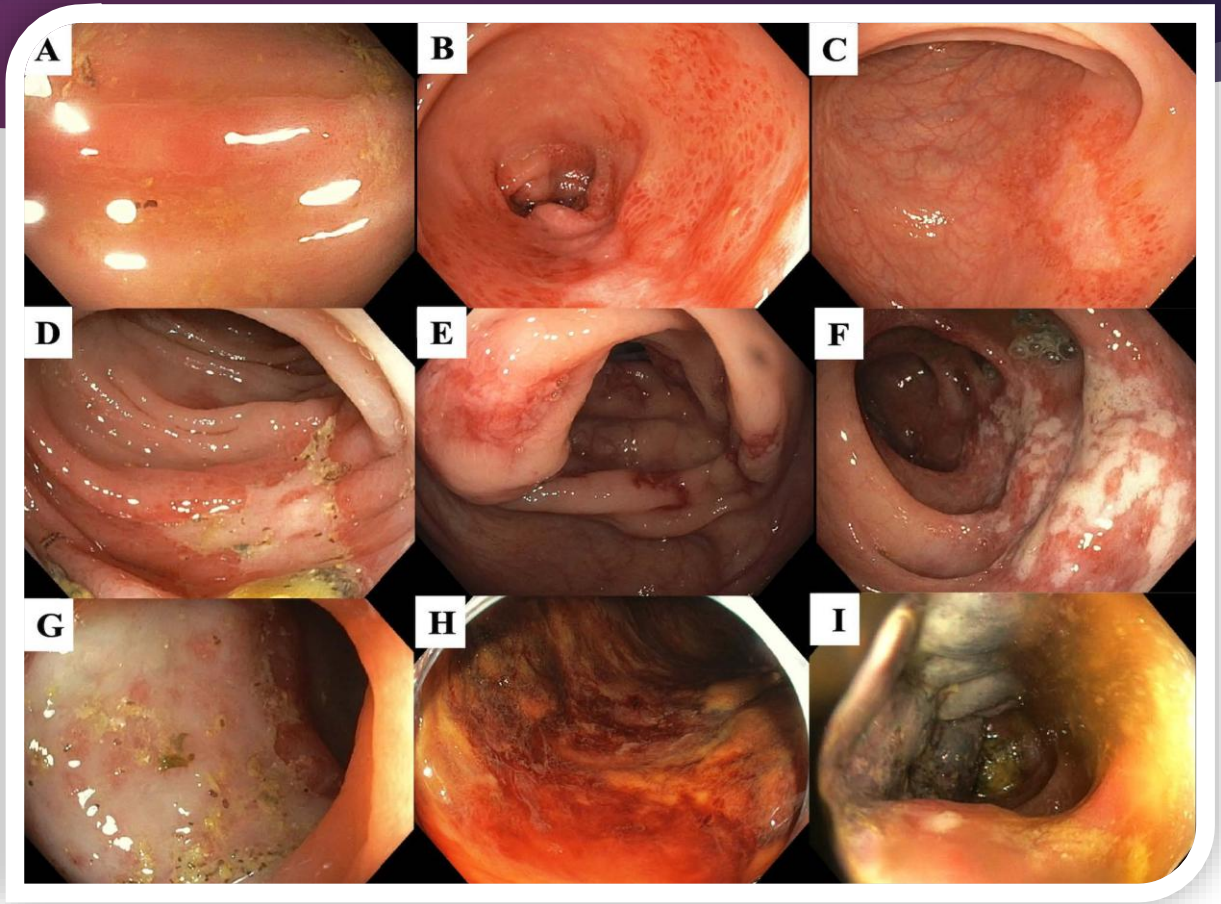
- NSAID enteropathy
- Secondary amyloidosis
- Drug-induced colitis
- Association with celiac disease




**NSAID-induced enteropathy in RA**

# Vasculitic Disorders

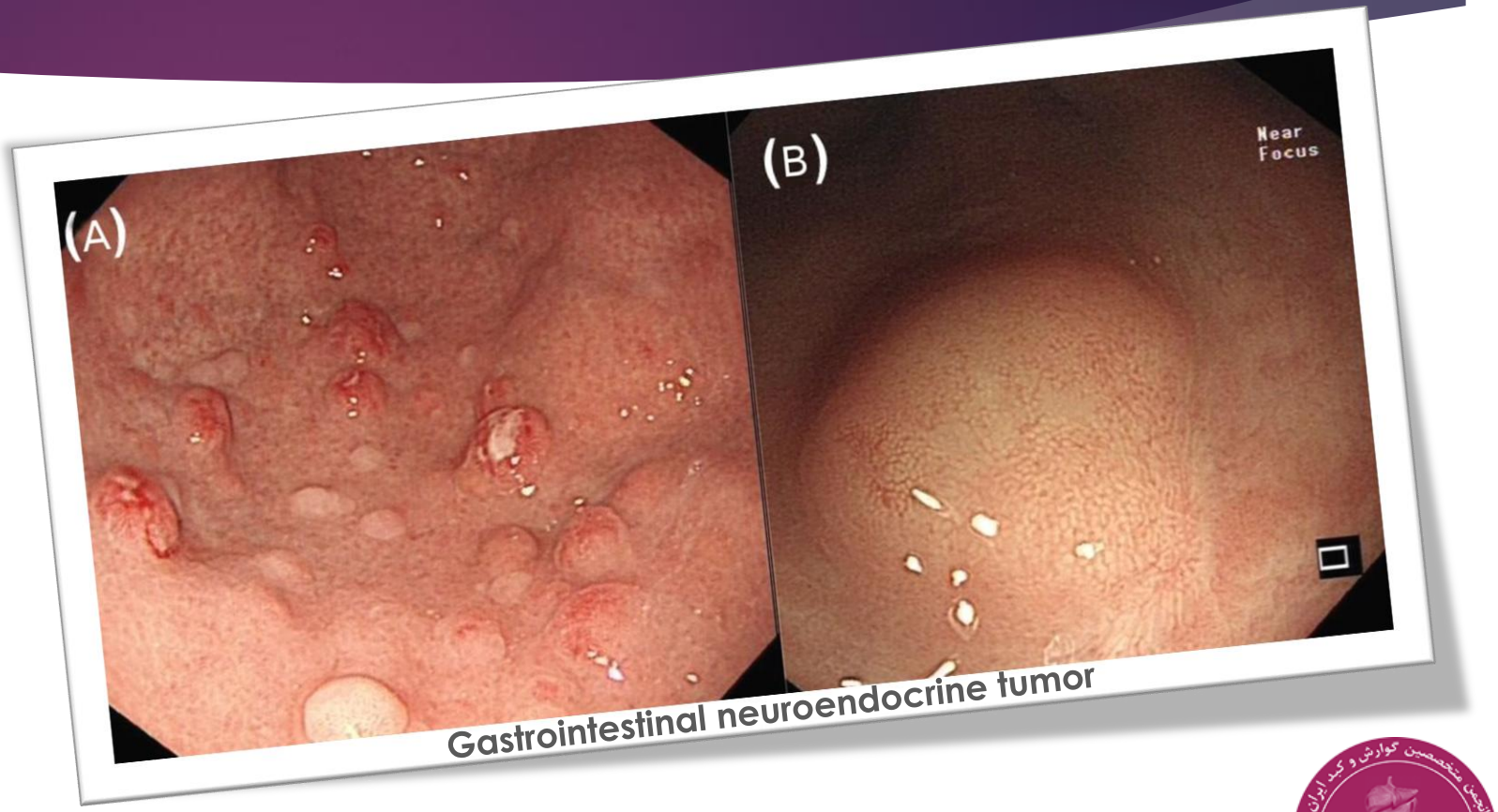
- Ischemic bowel injury
- Mucosal ulceration
- GI bleeding and diarrhea
- ANCA-associated diseases




Ischemic colitis as a cause of diarrhea and hematochezia

# Endocrine Causes

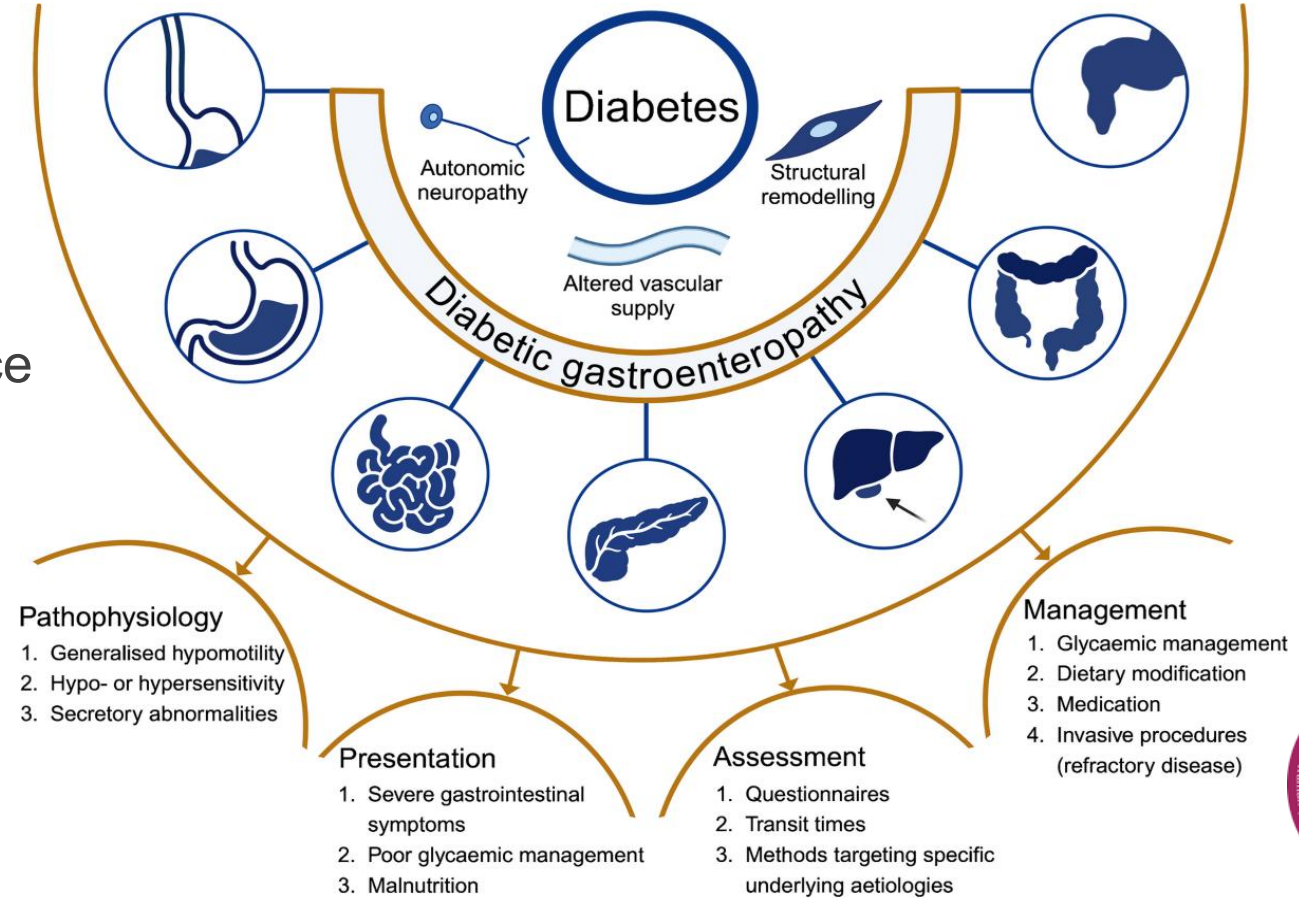
- Hyperthyroidism
- Diabetes mellitus
- Adrenal insufficiency
- Neuroendocrine tumors



Gastrointestinal neuroendocrine tumor

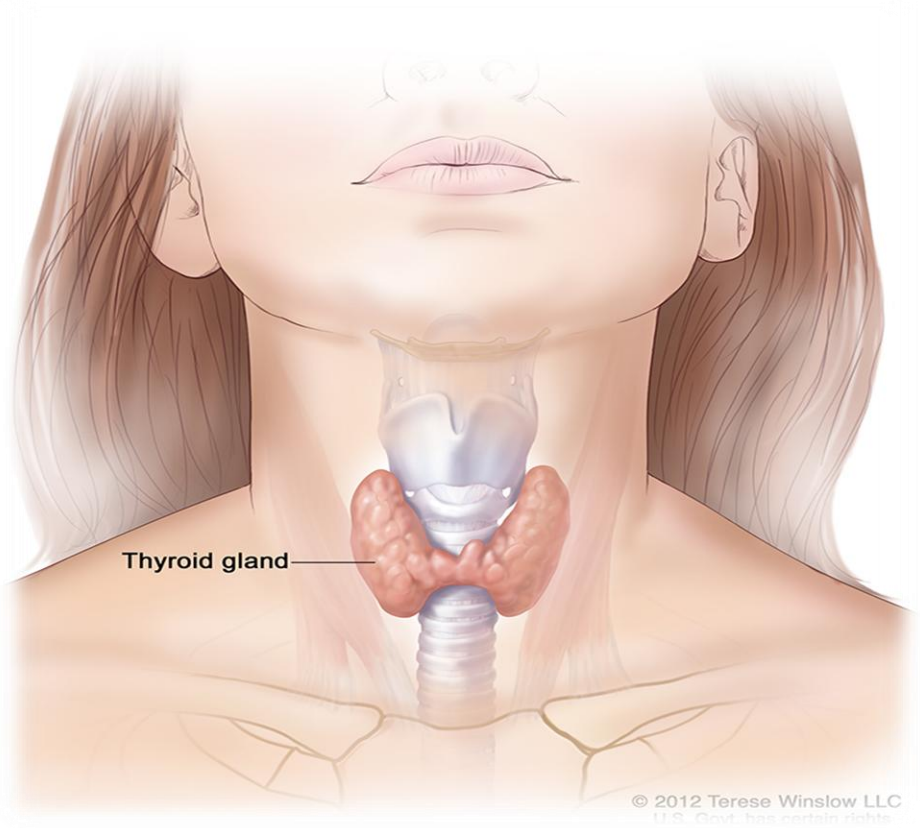
# Diabetic Enteropathy

- Autonomic neuropathy
- Rapid transit diarrhea
- Nocturnal symptoms
- Association with fecal incontinence



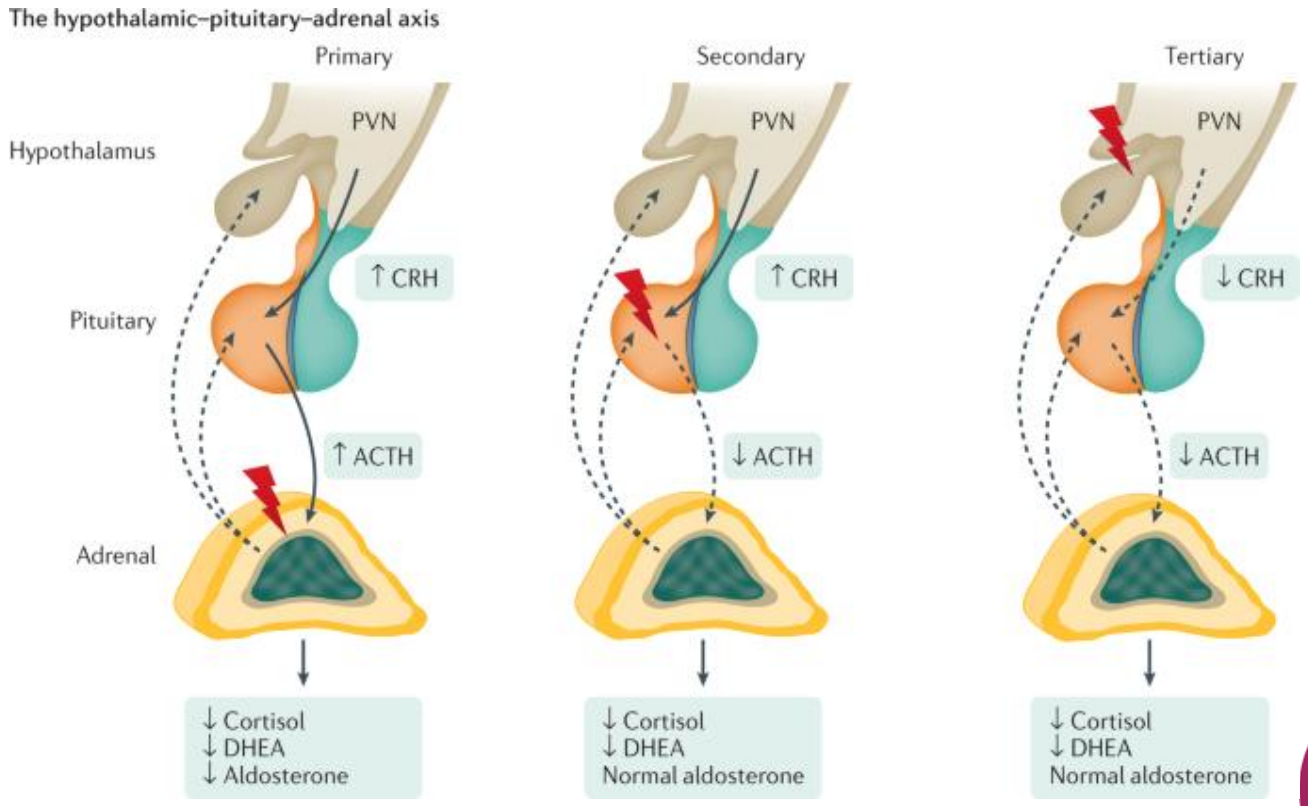
# Hyperthyroidism

- Increased intestinal motility
- Weight loss and diarrhea
- Associated hyperdefecation
- Management targets thyroid disease



# Adrenal Insufficiency

- Chronic watery diarrhea
- Electrolyte abnormalities
- Weight loss and fatigue
- May mimic IBS



# Neuroendocrine Tumors

- VIPoma
- Carcinoid syndrome
- Gastrinoma
- Secretory diarrhea syndromes

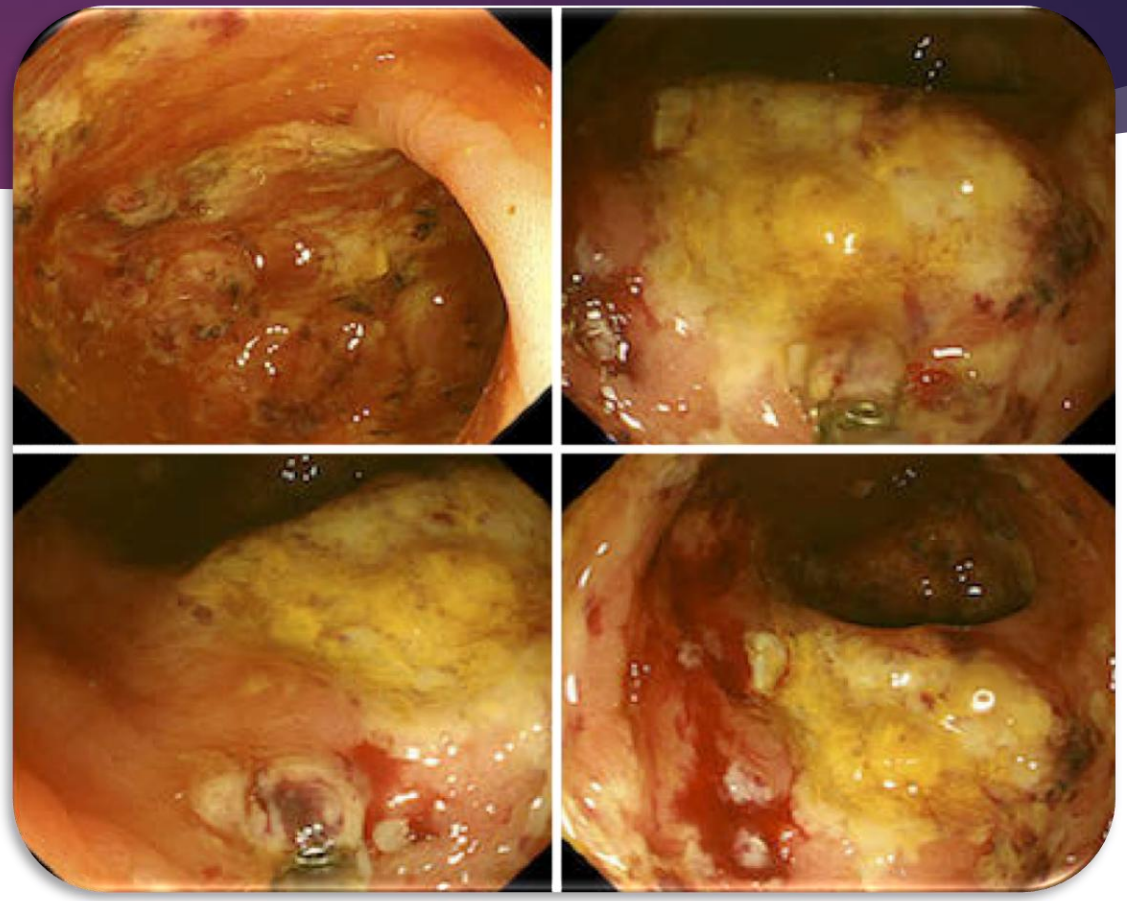


# Infectious Associations

- HIV enteropathy
- Tuberculosis
- CMV colitis
- Parasitic infections

# HIV-related Diarrhea

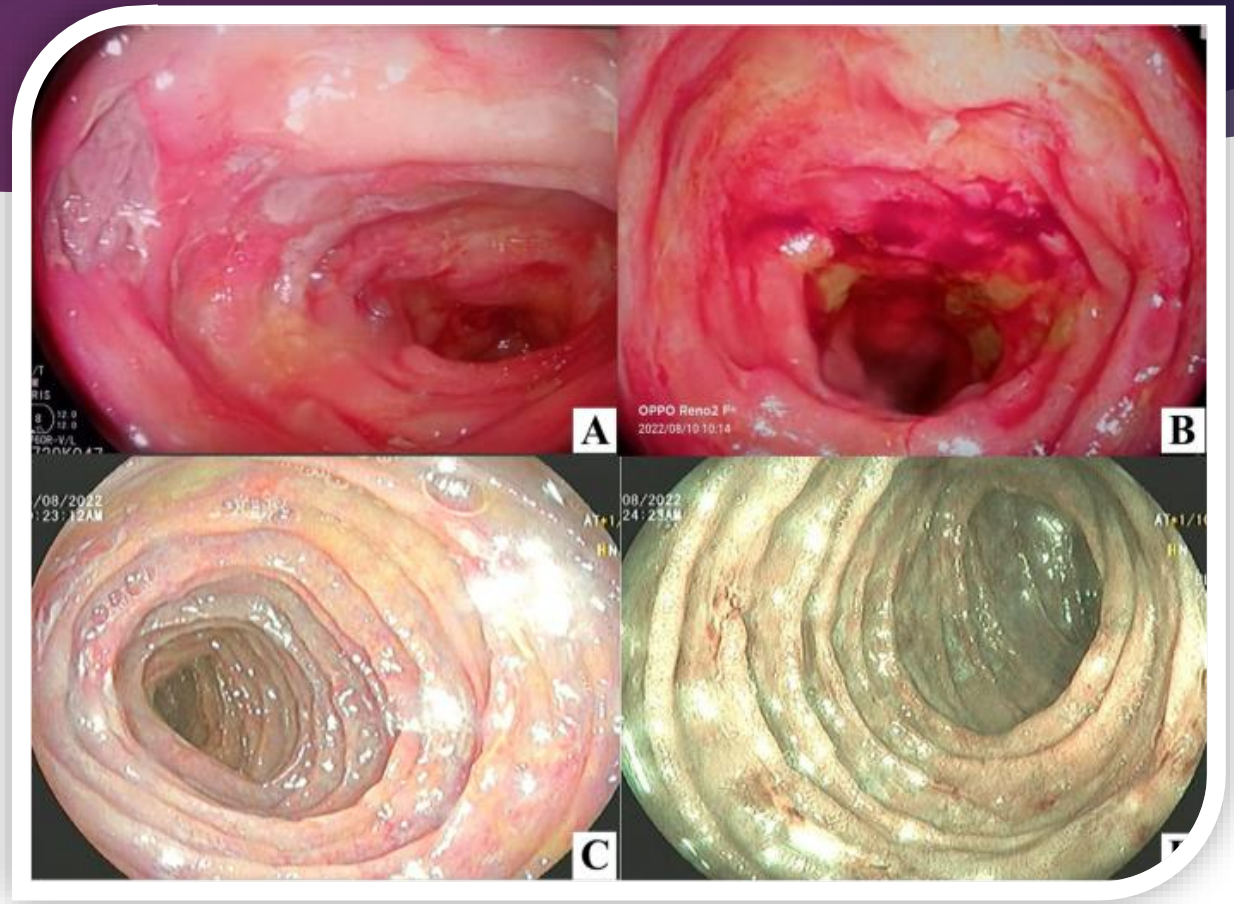
- Opportunistic infections
- ART-associated diarrhea
- Malabsorption syndromes
- Importance of immune status



An HIV- infected patient with confirmed overlapping complications of severe Amebic Colitis and CMV colitis

# Amyloidosis

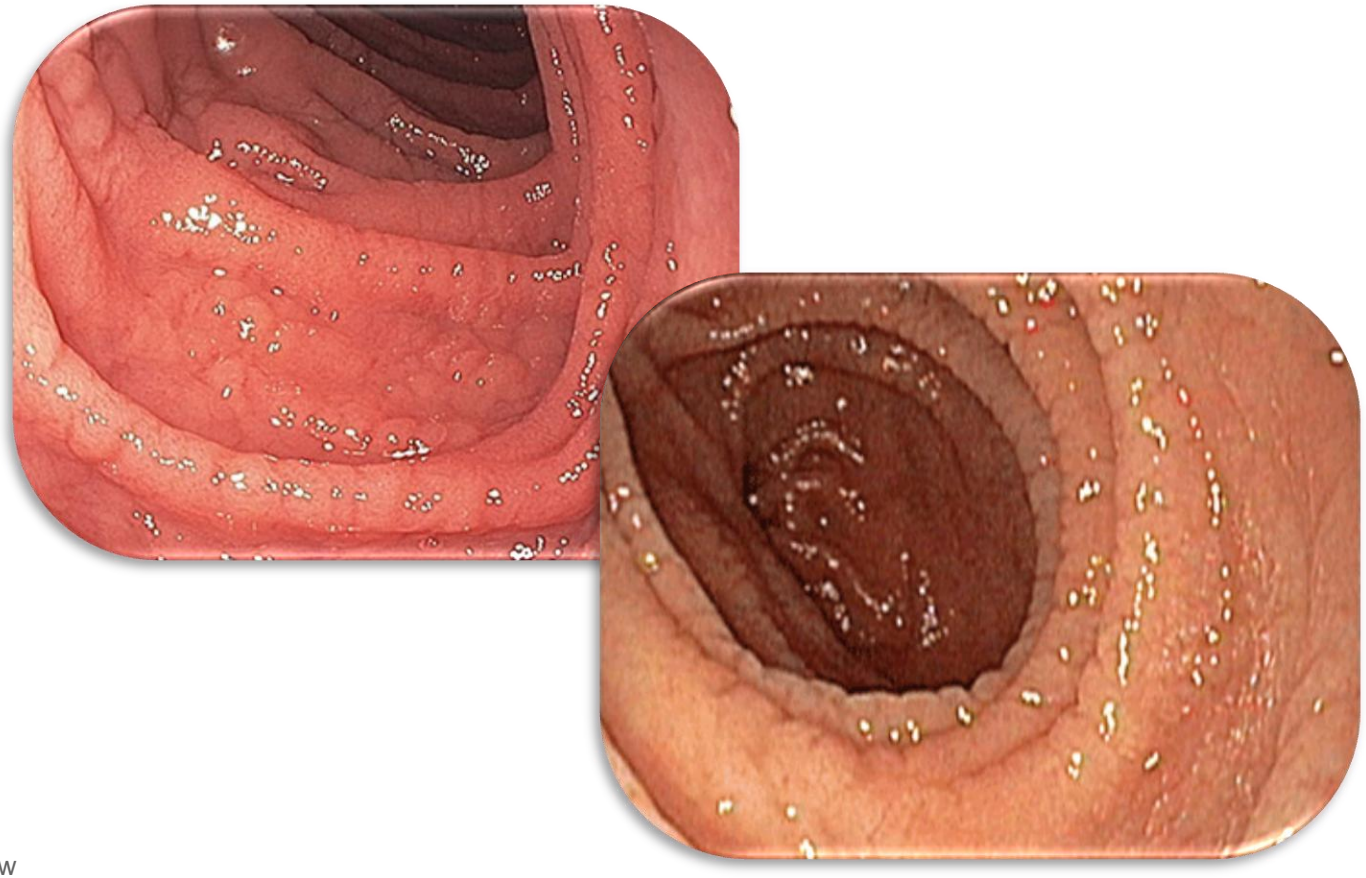
- Protein deposition in bowel wall
- Malabsorption
- Motility disturbances
- GI bleeding and diarrhea




**Primary localized ileal amyloidosis with chronic ileitis**

# Celiac Disease & Systemic Associations

- Autoimmune overlap
- Iron deficiency anemia
- Dermatitis herpetiformis
- Screening in chronic diarrhea



# Inflammatory Bowel Disease

- Extraintestinal manifestations
- Overlap with systemic inflammatory diseases
- Microscopic colitis associations
- Immune-mediated mechanisms





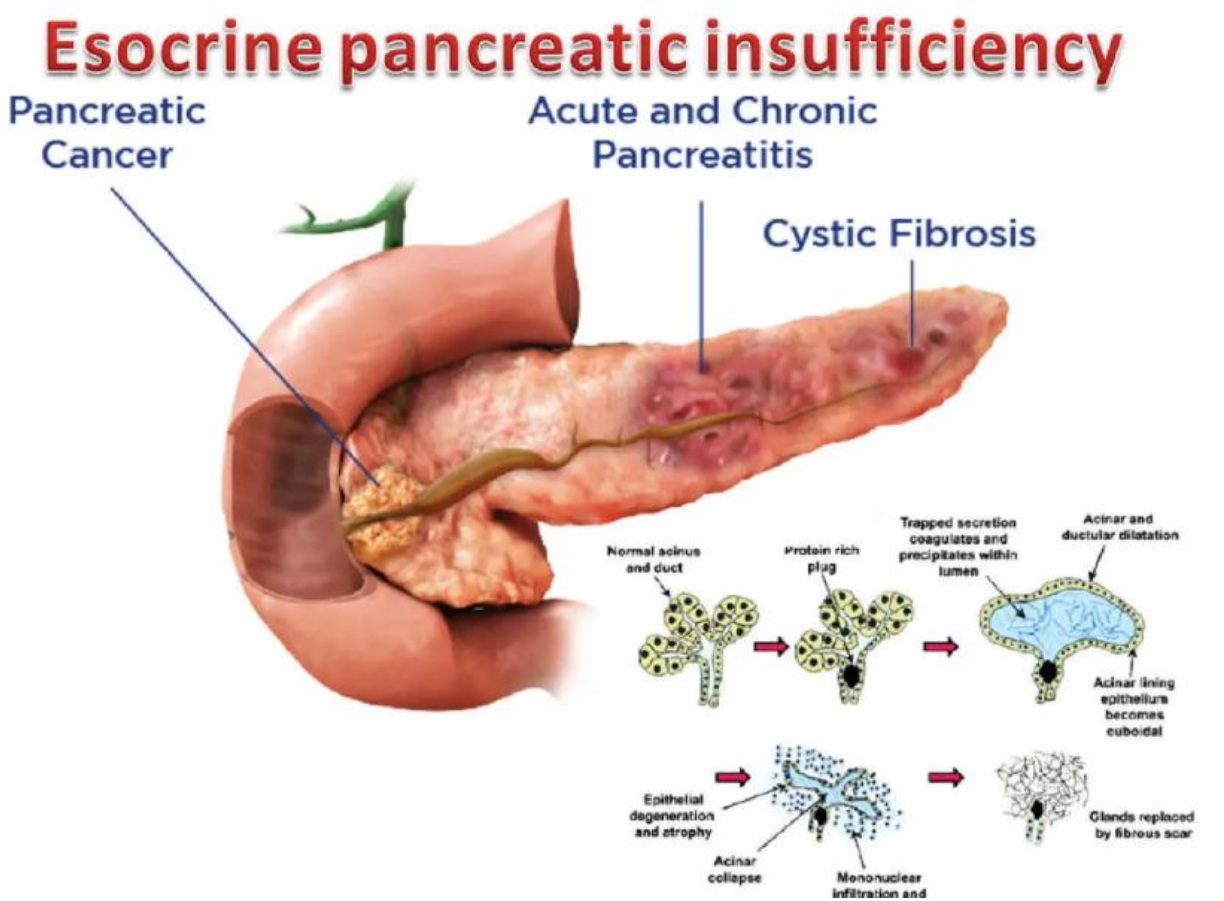
# Medication-Induced Diarrhea

- Metformin
- NSAIDs
- Immunosuppressants
- Checkpoint inhibitors



# Malabsorption Syndromes

- Pancreatic insufficiency
- Bile acid malabsorption
- Short bowel syndrome
- Nutritional deficiencies



# Small Intestinal Bacterial Overgrowth

- Common in motility disorders
- Bloating and diarrhea
- Breath testing
- Empiric antibiotics



# Diagnostic Evaluation

- CBC, ESR, CRP
- Stool studies
- Celiac serology
- Thyroid and endocrine testing

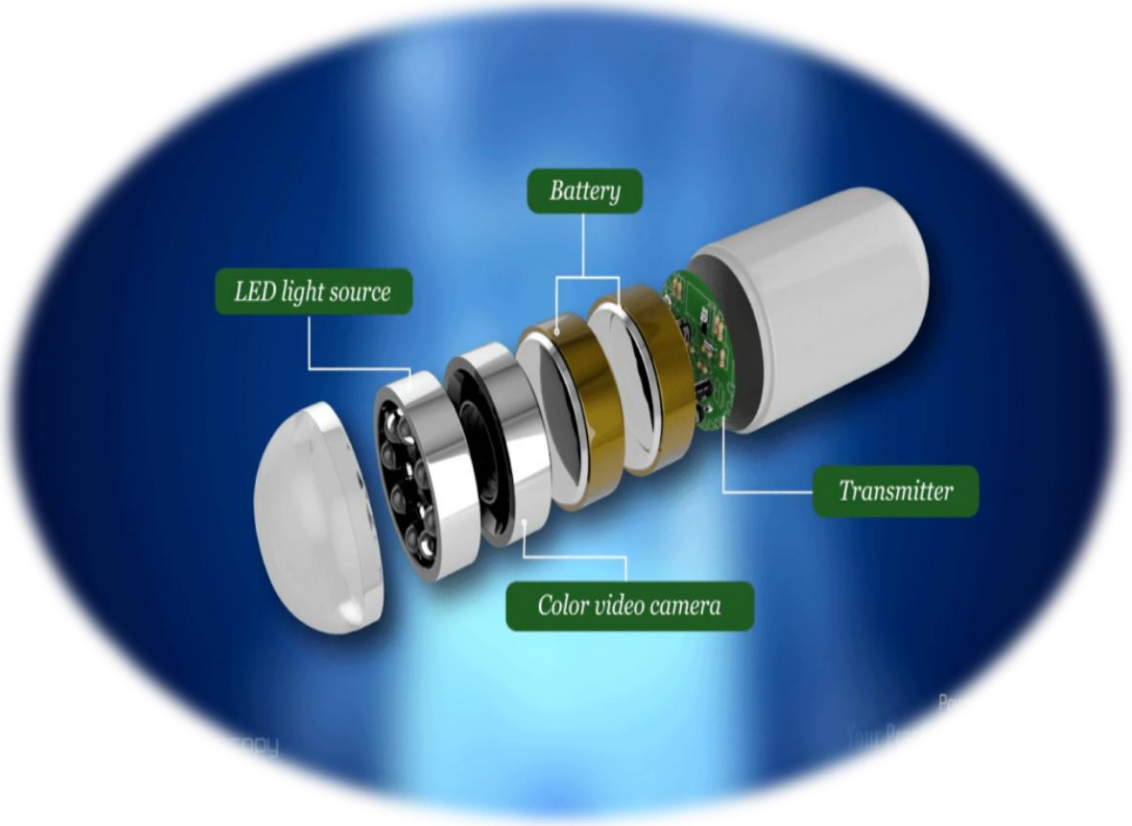
# Role of Endoscopy

- Upper endoscopy with biopsies
- Colonoscopy with ileoscopy
- Microscopic colitis diagnosis
- Assessment of inflammatory disease



# Imaging Modalities

- CT enterography
- MR enterography
- Capsule endoscopy
- Functional imaging in NETs



# Management Principles

- Treat underlying systemic disease
- Correct dehydration and nutrition
- Symptomatic therapy
- Multidisciplinary care

# Pharmacologic Treatment

- Antidiarrheals
- Bile acid sequestrants
- Biologic and immunomodulator therapy
- Antibiotics for SIBO





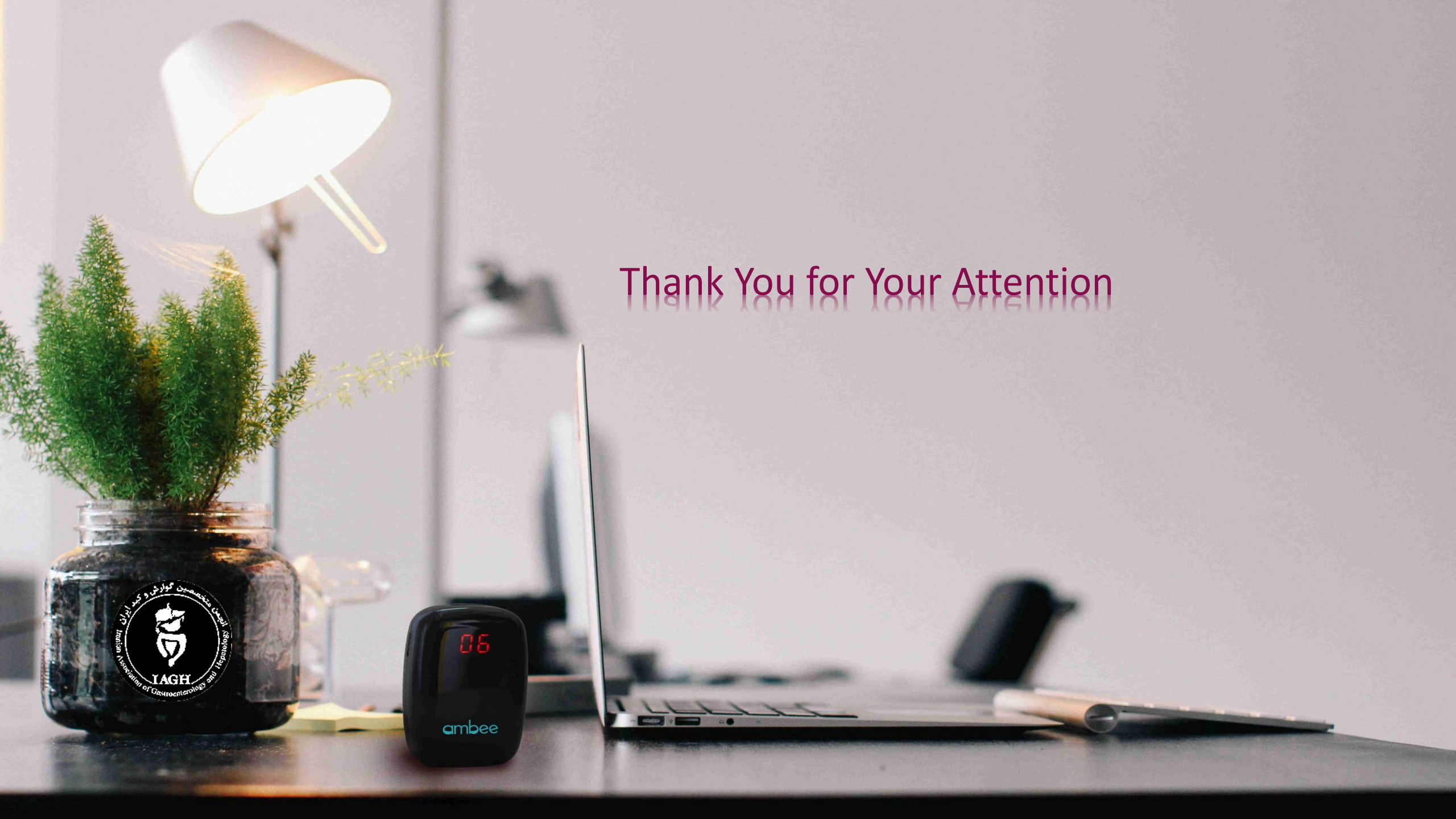

# Nutritional & Supportive Care

- Micronutrient replacement
- Dietitian involvement
- Enteral nutrition support
- Monitoring bone health



# Key Takeaways

- Systemic diseases are important causes of chronic diarrhea
- Targeted evaluation improves diagnosis
- Recognize medication-related etiologies
- Multidisciplinary management is essential




# Thank You for Your Attention