अन्नवह स्रोतस

Malabsorption Syndrome

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अन्नवह स्रोतस

- मूल

"अन्नवहानां स्रोतसां आमाशयो मूलम् वामं च पार्श्व"

(च.वि.५)

अन्नवह स्रोतस के मूल आमाशय व वाम पार्श्व हें|

" अन्नवहेद्वयो तयोर्मूलमामाश्योऽन्नवाहिन्यश्च धमन्य :"

आमाशय व अन्नवाहिनी धमनिया अन्नवह स्रोतस के मूल है

(सु.शा.९)

अन्नवह स्रोतोदुष्टि के हेतु –

अतिमात्रस्य चाकालेचाहितस्य च भोजनात् |
अन्नवाहिनी दुष्यन्ति वैगुण्यात् पावकस्य च ||

(च.वि.५)

अधिक मात्रा में,अकाल में,अहितकर अन्न \भोजन तथा अग्नि की विषमता से अन्नवाहि स्रोतस दुष्ट हो जाते है |

अन्नवह स्रोतस विध्द के लक्षण-

तत्र विद्धस्याध्मानं शूलोअन्नद्वेषश्छर्दी : पिपासाऽऽन्ध्यं मरणं च |

(सु.शा.९)

अन्नवह स्रोतस के विद्ध होने से शूल,अन्न द्वेष,छर्दी,पिपासा,अन्धता व मरण होता है |

अन्नवह स्रोतस में निम्न व्याधियों का समावेश होता है –

- अरुचि
- अग्निमान्ध
- अजीर्ण
- अनाह आध्मान आटोप
- गृहणी
- भस्मक
- अन्नद्रव शूल परिणाम शूल
- छर्दी
- गुल्म
- अम्लपित्त
- उदररोग

चिकित्सा

- लंघन,दीपन, पाचन,एवं शोधन चिकित्सा

रस योग-

अग्निकुमार रस,रामबाण रस, आनन्दभैरव रस, क्रव्याद रस,सूत शेखर रस ,प्रवालपंचामृत रस

चूर्ण-

पंचसकार चूर्ण ,त्रिफला चूर्ण,शिवाक्षार पाचन चूर्ण,अविपत्तिकर चूर्ण, नागराद्य चूर्ण,लवणभास्कर चूर्ण

वटी-

शंख वटी,चित्रकादि वटी,गंधक वटी,आरोग्यवर्धनी वटी,लशुनादि वटी

MALABSORPTION SYNDROME

Definition:

-It is a state arising from abnormality in absorption of food nutrients across the gastrointestinal tract(GIT).

-Impairment can be of single or multiple nutrients depending on the abnormality.

-This may lead to malnutrition and a variety of anaemias.

- Malabsorption constitutes the pathological interference with the normal physiological sequence of body such as:
- Digestion(intraluminal process),
- Absorption (mucosal process) and
- Transport (postmucosal events) of nutrients.

Causes of malabsorption:

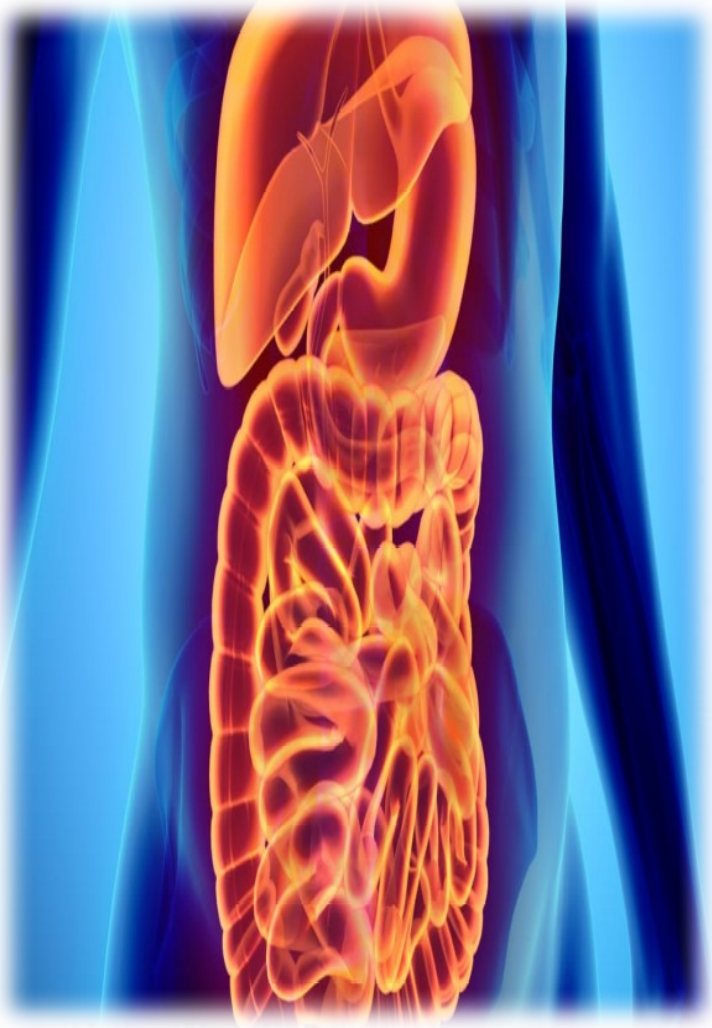
- Intestinal malabsorption can be due to:

  1. digestive failure caused by enzyme deficiencies
  2. structural defects
  3. mucosal abnormality
  4. infective agents
  5. systemic diseases affecting GIT

1. Due to digestive failure:

- **Pancreatic insufficiencies:**
  - cystic fibrosis
  - chronic pancreatitis
  - carcinoma of pancreas

- **Bile salt insufficiency:**
  - obstructive jaundice
  - bacterial overgrowth



2. Due to structural defects

- Inflammatory bowel diseases commonly: Crohn's Disease
- Gastrectomy and gastro-jejunostomy
- Fistulae, diverticulae and strictures.
- Infiltrative conditions such as amyloidosis, lymphoma.
- Short bowel syndrome.
- Eosinophilic gastroenteropathy etc.

3. Due to mucosal abnormality:

-Coeliac disease

4. Due to enzyme deficiencies:

-Lactase deficiency inducing lactose intolerance

- Disaccharidase deficiency
- Enteropeptidase deficiency

5. Due to infective agents:

-Whipple's disease
-Intestinal tuberculosis
-Tropical sprue
-Parasites e.g. *Giardia lamblia.*

6. Due to other systemic diseases affecting GI tract:

-Hypothyroidism and hyperthyroidism
-Diabetes mellitus
-Hyperparathyroidism and Hypoparathyroidism
-Carcinoid syndrome
-Malnutrition.

Symptoms of malabsorption

- Symptoms can abe

  1.Extraintestinal

  2.Intraintestinal

- Diarrhoea, often steatorrhoea is the most common feature. It is due to impaired water, carbohydrate and electrolyte absorption.
- Othersymptoms include:

  - Weight loss

  -Growth retardation

  -Swelling or edema

  -Anaemias

  -Muscle cramps and bleeding tendencies.

Specific Disease Entities causing malabsorption

1.Celiac sprue

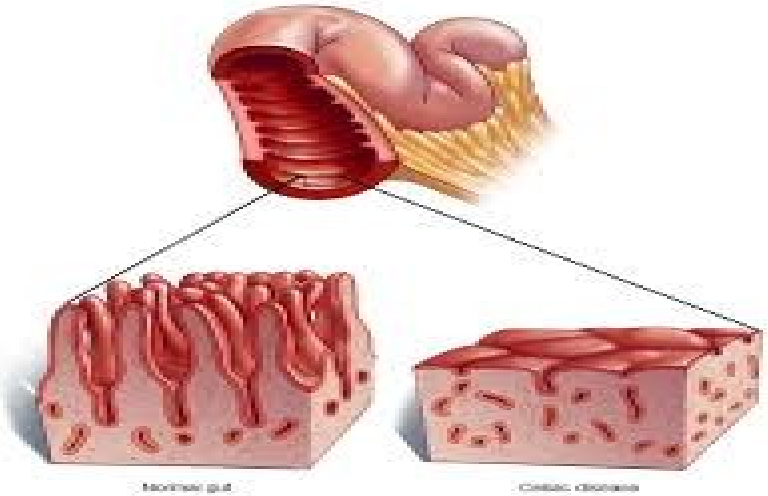
- common cause of malabsorption

- Age: ranging from first year of life through the eighth decade.

Etiology: not known.

But three factors can contribute:

1. environmental.
2. immunologic.
3. genetic factors.



1. Environmental factor:

- There is association of the disease with gliadin, a component of gluten that is present in wheat.

2. Immunologic factor:

- Serum antibodies are detected such as anti-gliadin.

3. Genetic factor:

- Almost all patients express the HLA-DQ2 allele

Diagnosis:

- A small-intestinal biopsy should be done for suspected patients.
- The hallmark of celiac sprue is the presence of an abnormal small-intestinal biopsy.

2.Tropical Sprue

- Caused by infectious agents including *Giardia lamblia*, *Yersinia enterocolitica*, *Clostridum difficile*.

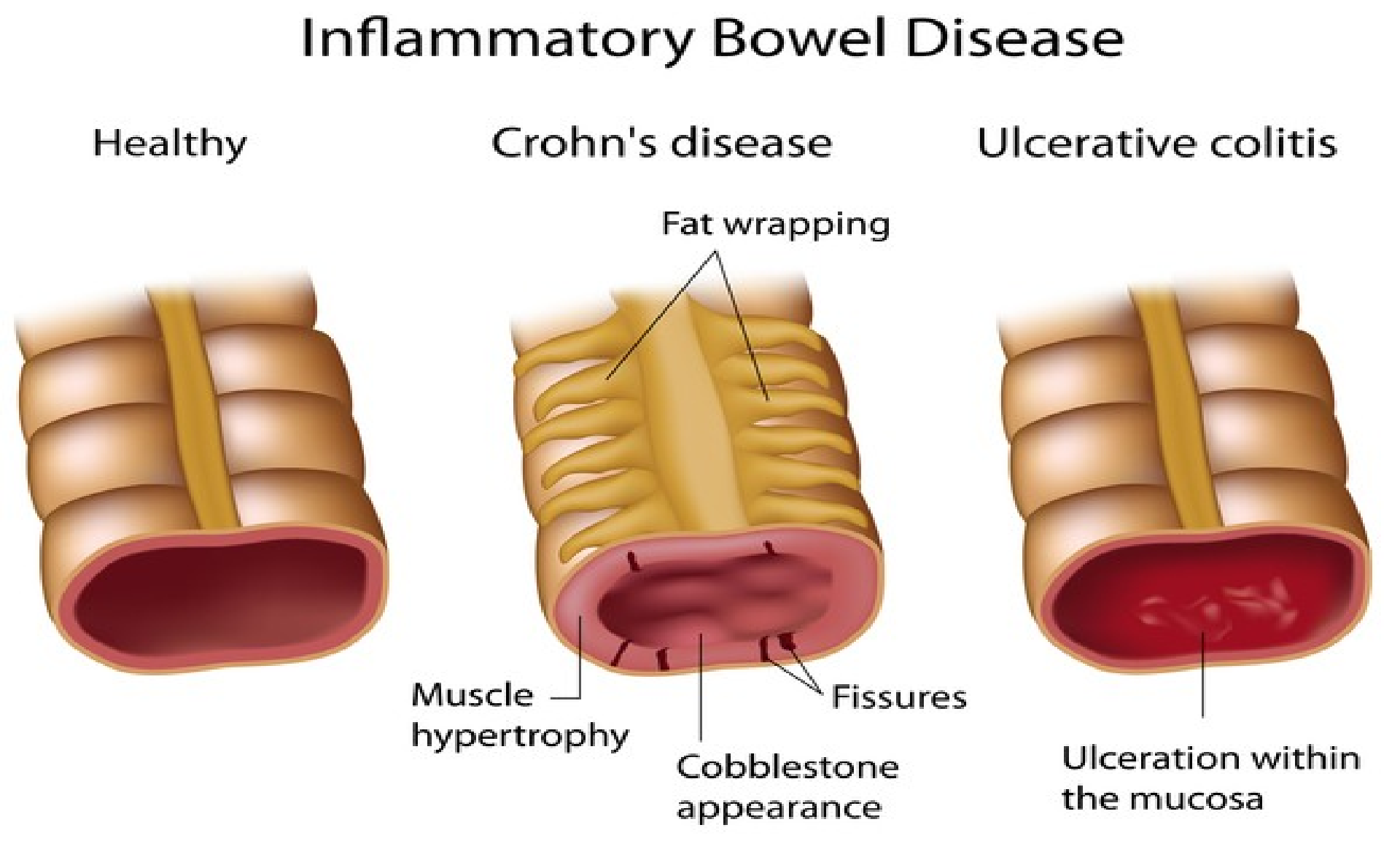
-it tends to involve the distal small bowel.

-total villous atrophy is uncommon.

3.Crohn's Disease

- It is an inflammatory bowel disease
- Marked by patchy areas of inflammation anywhere in GIT from mouth to anus .
- Body's immune system attacks GIT leading to chronic inflammation.

Inflammatory Bowel Disease



4. Short Bowel Syndrome

-Following resection, diarrhea and steatorrhea can appear due to decrease in the area of the absorptive surface area.

-Other symptoms include cramping, bloating and heartburn.

5.Bacterial Overgrowth Syndrome

- There is proliferation of colonic-type bacteria within the small intestine.
- Due to stasis caused by impaired peristalsis . This lead to diarrhea and malabsorption.

Pathophysiology:

** Bacterial over growth leads to:*

1. Metabolize bile salt resulting in deconjugation of bile salts;

→ ↓ Bile Salt and malabsorption of fat.

2. Damage of the intestinal villi by:
   - Bacterial invasion
   - Toxin/.
   - Metabolic products

→ Damaged villi → cause total villous atrophy.

6. Whipple's Disease

Cause: by the bacteria *Tropheryma whipplei*.

Effect:

Chronic multisystem disease associated with diarrhea, steatorrhea, weight loss, arthralgia, and central nervous system (CNS) and cardiac problems

Diagnosis:

- identification of *T. whipplei* by polymerase chain reaction (PCR).
- PAS-positive macrophages in the small intestine and other organs with evidence of disease.

Whipple's Disease

The root cause of Whipple's Disease is the bacterium Tropheryma Whipplei. This bacterium affects the mucosal lining of the small intestine in the beginning resulting in formation of small lesions in the intestinal wall.

* Management of malabsorption syndrome:

- **Replacement** of nutrients, electrolytes and fluid may be necessary.
- In severe deficiency, hospital admission may be required for **parenteral administration**.
- **Pancreatic enzymes** are supplemented orally in pancreatic insufficiency.
- **Dietary modification** is important in some conditions:
  - Gluten-free diet in coeliac disease.
  - Lactose avoidance in lactose intolerance.
- **Antibiotic therapy** will treat Small Bowel Bacterial overgrowth.