

Malabsorption

1. Coeliac disease (gluten-sensitive enteropathy):

- Inflammation of the jejunal mucosa that improves when the patient is treated with a gluten-free diet.
- *Incidence:*
 - common in Northern Europe.
 - Increased incidence within families (10-15% of first degree relatives).
 - A strong association with HLA-B8, DR17 and DQ.

Etiology :

- Gluten is the water insoluble component of wheat and barley protein, can be fractionated into α , β and γ gliadin. γ gliadin is the main damaging peptide.
- The precise mechanism is unclear but T cells play a central role.
- T cells react with the enzyme tissue transglutaminase, it modifies gliadin and enhance gliadin specific T cell response in genetically predisposed individuals.
- The jejunal mucosa contains an excess of IgA-secreting cells. Circulating antibodies to gliadin and endomysium are found.

Pathology:

- Pathological changes variable according to severity.
- In mild to moderate cases, heris partial villous atrophy
- In severe cases, the jejunal mucosa is flattened with loss of surface villi
- There increased number of intraepithelial lymphocytes and accumulation of lymphocytes and plasma cells in the lamina propria.

Clinical Features:

- Any age, most common in young adults.
- Presentation depend on severity; ranges from tiredness, weight loss and anemia to florid malabsorption.
- On Examination; features of malnutrition & mild abdominal distension may be present.
- The disease may be associated with other autoimmune disorders.

Investigations:

1. Endomysial (EMA) and Tissue transglutaminase (tTG) antibodies (IgA): high sensitivity and specificity.
2. Antireticulin antibodies (ARA), sensitive but not specific.
3. Doudenal and jejunal biopsy; the gold standard for diagnosis.
4. Heamatological examination; anemia.
5. Small bowel follow-through may show dilatation with change in fold pattern.
6. Others: serum albumin, calcium and phosphate.

Treatment

1. Gluten-free diet usually produces rapid response. A gluten challenge confirm the diagnosis.
2. Replacement heamatenics; iron, folic acid, calcium.

Complications

1. Unresponsive coeliac disease; often no cause could be found but ulcerative jejunitis, intestinal lymphoma or carcinoma may be responsible. Steroids or immunosuppressive agents are used.
2. Increased incidence of enteropathy-associated T-cell lymphoma, carcinoma of the small bowel and esophagus as well as extra-GIT cancers.
3. Metabolic bone diseases is common in long standing cases.