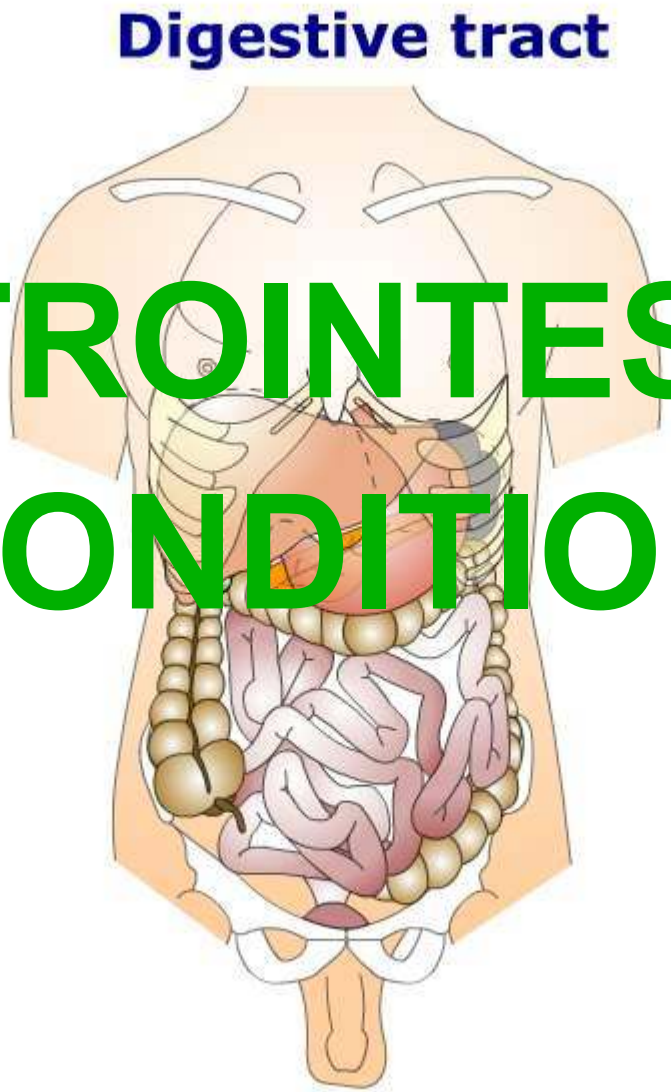


GASTROINTESTINAL CONDITIONS

Common GI pathologies

- Acute abdomen
- Peritonitis
- Bowel obstruction
- GI haemorrhage
- Gastroenteritis
- Diseases of mouth & tongue
- Hiatus Hernia
- Peptic ulcer
- Appendicitis
- Inflammatory bowel disease
- Diverticular disease
- Irritable bowel syndrome
- Malabsorption syndromes
- Hernias
- Haemorrhoids
- Hepatitis & Cirrhosis of the liver
- Gallstones
- Pancreatitis
- Gastrointestinal neoplasia
  - Oesophagus
  - Stomach
  - Colon
  - Rectum
  - Pancreas
  - Liver

Abdominal pain

Surgical causes

- Abdominal aortic aneurysm
- Acute appendicitis
- Biliary colic
- Cholecystitis
- Colon carcinoma
- Diverticular disease
- Gastric carcinoma
- Pancreatitis
- Gastrointestinal perforation
- Peptic ulcer
- Acute salpingitis
- Acute urinary retention
- Urinary tract stones
- Ectopic pregnancy
- Dissecting aortic aneurysm

Medical causes

- Gastroenteritis
- Urinary tract infection
- Diabetes
- (Pneumonia)
- (Myocardial infarction)
- TB
- Malaria
- Typhoid
- Cholera
- Drugs
- IBS
- Inflammatory bowel disease
- Malabsorption

Stomatitis

- **Non-infections**
  - Crohn's disease
  - ulcerative colitis
  - coeliac disease
  - Angular stomatitis
  - Nutrient deficiencies
- **Infectious**
  - Bacterial
  - Viral
  - Fungal

Angular stomatitis

- Contact allergy
- Atopic or seborrhoeic dermatitis
- Vitamin B deficiencies
- Iron deficiency

Infectious stomatitis

- Bacterial
- Viral
- Fungal

Localised Peritonitis

"Inflammation of the peritoneal cavity"

- Localised peritonitis can be caused by:
  - Transmural bowel inflammation, e.g. Appendicitis, diverticulitis, crohn's disease
  - Transmural inflammation of other viscera, e.g. Salpingitis, cholecystitis
  - Transmural ischaemia, e.g. Ischaemic bowel obstruction - strangulating hernia

Localised peritonitis
Clinical features

- Localised tenderness
- Contraction of the abdominal muscles
- Guarding
- Rebound tenderness
- Rectal tenderness
- Features of mild systemic toxicity

Generalised Peritonitis

Generalised peritonitis can be caused by the following:

- Localised peritonitis if left for long enough
- Perforation
- Chemical peritonitis
- Spreading intraperitoneal infection

The clinical features of generalised peritonitis

- Patient is systemically very ill - fever, tachycardia, prostration
- Postural hypotension
- On examination:
  - Rigidity of the abdominal wall
  - Diffuse abdominal tenderness
  - Bowel sounds may be absent because of peristaltic paralysis
  - If there is severe peritonitis, e.g. Faecal, there may be signs of gram-negative bacteraemic shock, i.e. Hypotensive, cold patient
  - Rectal tenderness
- Radiography

Bowel obstruction

- Mechanical causes:
  - Faeces, gallstones
  - Inflammation, neoplasm
  - Adhesions, hernias
- Small and large bowel obstructions:
  - Adhesions
  - Jammed hernias
  - Carcinoma
  - Volvulus

Bowel obstruction symptoms

- Vomiting
- Colic
- Distension - visible peristalsis may be present
- Absolute constipation

GI haemorrhage

- Haematemesis
- Melaena
- Massive rectal bleeding

GI haemorrhage causes

Common causes of a upper GI bleed include:

- Peptic ulces
- Gastric erosions
- Oesophageal varices

Common causes of a lower GI bleed include:

- Angiodysplasia
- Diverticular disease
- Colonic carcinoma or polyp
- Haemorrhoids

Gastroenteritis

Gastroenteritis is an infectious illness affecting the upper gastrointestinal tract - the stomach and, less often the small bowel.

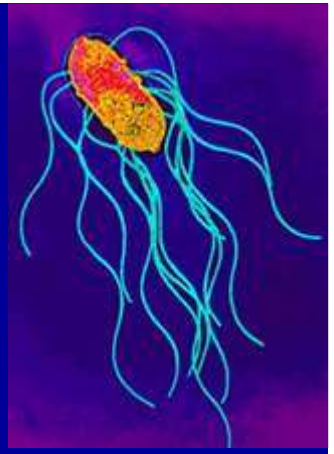
The clinical features are:

- Acute onset
- Less than ten days duration
- Fever
- Diarrhoea and/or vomiting
- The aetiology is usually viral, especially in children.

Gastroenteritis - causes

- Bacterial
- Viral
- Aboebic (dysentery)
- Drugs
- Diverticular disease
- Colonic carcinoma
- IBS
- IBD
- Malabsorption
- Diabetes
- Thyrotoxicosis

Salmonella food poisoning



Infective agenets: S. enteritidis, S. typhimurium, S. virchow, S. hadar, S. heidelberg, S. agona and S. indiana

- Involves small and large bowel
- Enterocolitis
- Nausea, vomiting, malaise, headaches, fever, cramps, watery diarrhoea, blood & mucus

1. Colonic Ca
2. Diverticular disease
3. Ulcerative colitis
4. Dysentery
5. Campylobacter enteritis
6. Ischaemic colitis

Rectal bleeding → Haemorrhoids → But no diarrhoea!

Types of hernae

- Hernia (abdominal)
- Hiatus hernia
- Sliding hiatus hernia
- Strangulated hernia
- Inguinal hernia (congenital)
- Infantile inguinal hernia
- Hernia (inguinal,congenital)
- Congenital inguinal hernia
- CDH (congenital diaphragmatic hernia)
- Congenital diaphragmatic hernia
- Indirect and direct inguinal hernia
- Strangulated inguinal hernia
- Direct inguinal hernia
- Inguinal hernia
- Hernia (inguinal)
- Indirect inguinal hernia
- Para-oesophageal hernia

Peptic ulcer - Aetiologies

An imbalance between secretion and neutralization of secreted acid

- Heredity
- Sex (increased incidence in males)
- Stress
- Use of NSAIDs
- Smoking
- Helicobacter pylori
- Hypercalcaemia
- Colchicine therapy
- Renal failure

Peptic ulcer – (Gastric & Duodenal)

Clinical features

- Recurrent epigastric pain
- Mostly relieved by food
- Pain at night
- Weight loss
- Haematemesis
- Melena
- Vomiting

Appendicitis - Symptoms

- Patient wishes to lie still, often with legs drawn up
- Nausea and vomiting after the onset of pain
- Infrequently, diarrhoea:
  - Early and transient as a result of visceral pain
  - Later if retroileal or pelvic involvement appendix; this is typically prolonged and mucoid
- Loss of appetite - often precedes the pain by a few hours - a reasonably sensitive symptom
- Constipation

Appendicitis - Signs

- Lying still, with shallow breaths and reluctant to cough
- Tachycardia
- Fever 37.5-38.5^{0}c, worsening with perforation
- Foetor oris - halitosis
- Furred tongue
- Flushed
- Right iliac fossa tenderness

Inflammatory bowel disease

Ulcerative colitis

&

Crohn's disease

Ulcerative colitis

Clinical features

- Ulcers
- Diarrhoea
- Blood
- Mucus
- Fever
- Abdominal pain
- Dehydration
- Weight loss

Crohn's disease

Clinical features

- Diarrhoea (no blood)
- Pus
- Perianal fistulae
- Bowel obstruction
- Perforation
- Malabsorption

- ➔ western life style?

Diverticular disease

- Persistent ache with colicky exacerbations felt in the left lower quadrant
- No radiation
- Not precipitated by eating
- Distension, flatulence and belching
- Constipation - infrequent bowel actions and hard stool
- Appetite and weight remain normal

Irritable bowel syndrome

"A functional bowel disorder"

- Abnormal stool frequency
- Abnormal stool form
- Abnormal stool passage
- Passage of mucus
- Bloating or feeling of abdominal distension.

Malabsorption syndromes

The common causes of malabsorption in the UK are:

- Coeliac disease
- Lactose intolerance
- Chronic pancreatitis
- Small bowel resection
- Small bowel bacterial overgrowth
- Giardiasis
- Tropical sprue is the most common cause worldwide.

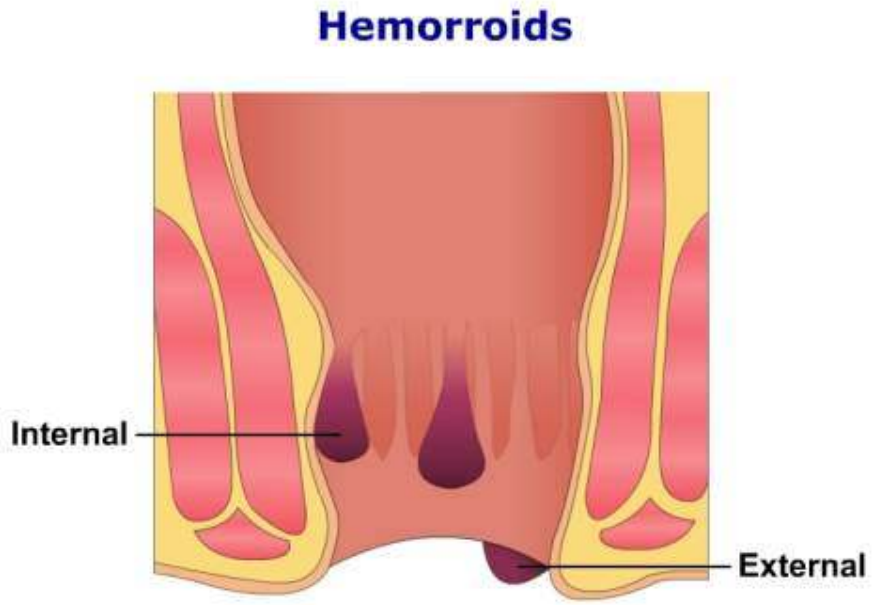
Malabsorption syndromes

Clinical features can be grouped into those suggestive of:

- Macronutrient malabsorption
- Micronutrient malabsorption
- Clues in the history include:
- Medication - alcohol, neomycin, cholestyramine, metformin, and antimetabolites e.g. Methotrexate
- Previous gastrointestinal surgery
- Health of siblings and parents - impaired growth compared to other family members suggests chronic malabsorption

Haemorrhoids

- Differential diagnosis
  - Rectal prolapse
  - Anal polyp
  - Inflammatory bowel disease
  - Rectal carcinoma



Hepatitis

Aetiologies

- Viral
- Other infections
- Alcohol
- Drugs
- Autoimmune

Hepatitis - A

Faecal ⇒ oral route

Clinical features

- Jaundice
- Pruritus
- Malaise
- Myalgia
- Arthralgia
- Fever
- Diarrhoea
- Hepatomegaly (tender)

Hepatitis - B

Transmitted parenterally, or by intimate, usually sexual, contact

- 2-6 month incubation.
- There is a prodrome of non-specific symptoms such as fever, joint pain, urticarial or maculopapular rashes, malaise, and non-specific gastrointestinal symptoms such as nausea.
- The acute episode may be similar to that seen in HAV or HAC but more severe. Jaundice rarely persists for more than 4 weeks and usually, is not severe.

Hepatitis - C

- By blood or sexual transmission

Symptoms:

- Mild – similar to other hepatides
- Jaundice in 10%
- 85% can progress to become chronic
- Risk of hepatocellular carcinoma

Gallstones

- 15% of population in West
- Most non-symptomatic
- Bile: cholesterol & bile pigments (haemoglobin & phospholipids)
- Elderly, obese, oral contraceptives, steroids
- PDP: western diet, High fats, protein, salt
- Crohn's disease

Gallstones – clinical features

- Acute cholecystitis
  - Fever, vomiting, localised peritonitis, +ve Murphy's sign
- Chronic cholecystitis
- Biliary colic
- Obstructive jaundice
- Cholangitis
- Empyema

Pancreatitis

- Acute pancreatitis: Inflammatory reaction of the pancreas and surrounding tissues, enzymes escaping into the abdominal cavity.

- Causes: gallstones, alcohol, idiopathic
  - Rare: mumps, surgery, steroids, diuretics

Pancreatitis – clinical features

- Abdominal pain radiatinf to the back
- Vomiting
- Abdominal tenderness
- Shock
- Bruise-like around umbilicus or flanks
- High serum amylase

Carcinoma of oesophagus

- Link to alcohol and smoking
- Dysphagia
- Palpable supraclavicular lymph nodes
- Weight loss
- Anorexia
- Aspiration pneumonia

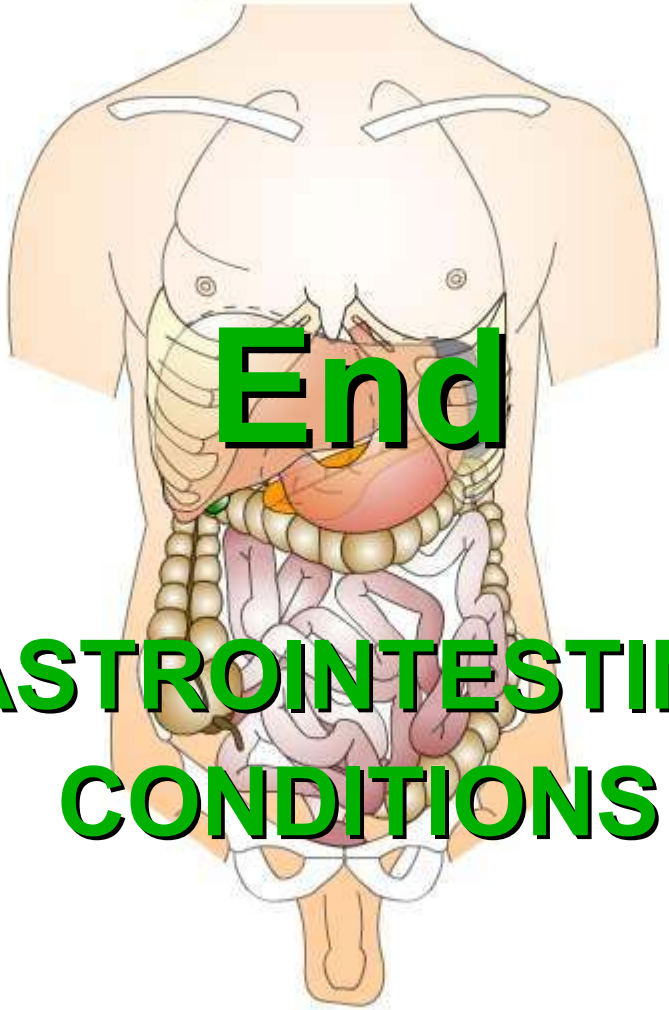
Carcinoma of the stomach

- 10:100,000 in UK
  - Associated with: gastric polyps, chronic gastritis, blood group A, pernicious anaemia, smoked fish, preservatives
- Clinical features:
  - Weight loss, nausea, vomiting, fullness, dysphagia, diarrhoea
- Advanced Clinical features:
  - Enlarged liver, jaundice, ascites, haematemesis, lymph node enlargement

Carcinoma of the colon

- PDP: Ulcerative colitis, Crohn's disease, polyps, low fibre diet
- Clinical features:
  - Rectal bleeding, change in bowel habit, pain, anaemia, weight loss, obtruction, perforation, fistula, ascites, jaundice

Digestive tract



End

GASTROINTESTINAL CONDITIONS