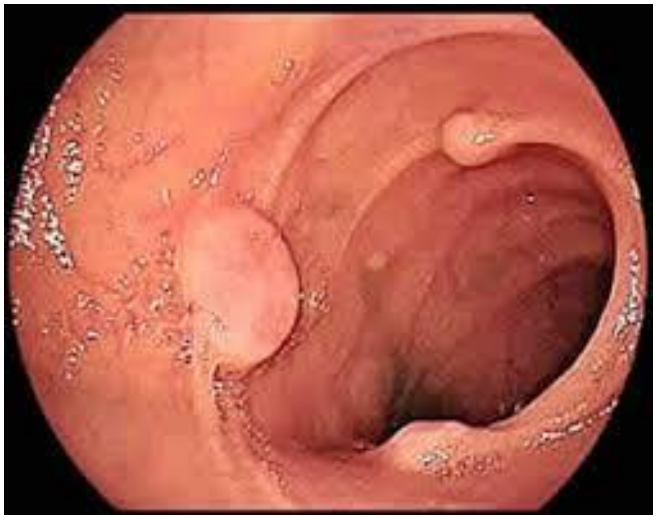
Small Bowel Malignancy



- Small bowel tumours are rare and in total account for less than 10% of gastrointestinal neoplasia.

TUMOURS OF THE SMALL INTESTINE

Benign

Peutz–Jeghers syndrome

Malignant

Adenocarcinoma
Carcinoid tumours
Lymphoma
Gastrointestinal stromal tumours

Peutz–Jeghers syndrome

- This is an autosomal dominant disease characterised by melanosis of the mouth and lips, with multiple hamartomatous polyps in the small bowel and colon.
- Polyps may be removed by enterotomy or, at laparotomy, snared via a colonoscope introduced via an enterotomy.

Malignant

- Adenocarcinoma
- Carcinoid tumours
- Lymphoma
- Gastrointestinal stromal tumours

- Small bowel malignancy is rare and classically presents late, most often diagnosed after surgery for small bowel obstruction.
- Four types will be considered, which account for over 99% of small bowel malignancies: adenocarcinoma, carcinoid tumours, lymphomas and mesenchymal tumours (gastrointestinal stromal tumours [GIST]).

Adenocarcinoma

- More often found in the jejunum than the ileum.
- It is more common in patients with Chron's disease, coeliac disease, familial adenomatous polyposis, hereditary non-polyposis colon cancer and Peutz–Jeghers syndrome.

Clinical presentation

- The tumours present with anaemia, overt gastrointestinal bleeding, intussusception or obstruction.

Prognosis

- Prognosis is poor in patients with Chron's disease.
- In whom these tumours often present late, because the symptoms are commonly mistaken for those of Chron's disease and treated conservatively.

Treatment

- Surgical treatment is a resection of 5 cm of non-involved bowel either side of the lesion and the affected mesentery.
- A right hemicolectomy is likely to be required for tumours of the distal ileum.

Carcinoid tumours

- Neuroendocrine tumours
- Occur throughout the gastrointestinal tract,
- Most commonly in the appendix, ileum and rectum.
- The tumour arises from Kulchitsky cells at the base of intestinal crypts.
- Lymph node metastases can occur.

- Carcinoid tumours can produce a number of vasoactive peptides, most commonly 5-hydroxytryptamine (serotonin), but also histamine, prostaglandins and kallikrein.

When they metastasise to the liver

Carcinoid syndrome

Diarrhoea
Bronchospasm
Facial/upper chest flushing
Palpitations
Tricuspid regurgitation

Treatment

- Surgical resection is usually sufficient for patients with primary disease.
- Hepatic resection can be carried out in patients with metastatic disease.
- Octreotide (a somatostatin analogue), which reduces both flushing and diarrhoea.

Lymphoma

- May be primary or, more commonly, secondary to systemic lymphoma.
- The incidence of small bowel lymphoma is increased in patients with Chron's disease and immunodeficiency syndromes.

Clinical presentation

- They usually present with anaemia, bleeding, perforation, anorexia and weight loss.
- T-cell lymphoma develops in patients with coeliac disease.

Types of lymphoma

T-cell lymphoma	→	Develops in patients with coeliac disease.
Burkitt's lymphoma	→	Aggressively affect the ileocaecal region, particularly in children

Gastrointestinal stromal tumours

- Mesenchymal tumours and the distinction between benign or malignant types is difficult even on histological examination.
- Most commonly in the stomach, but can be found in other parts of the gut.

- They occur most commonly in the 50- to 70-year age group.
- Although the cause is unknown, patients with neurofibromatosis have an increased risk of developing these types of tumour.

Treatment

- Glivec (imatinib) is a tyrosine kinase inhibitor that has been shown to be effective in advanced cases and may also have a role in adjuvant treatment.