

Gastroenterology

Gastric Carcinoma

Epidemiology**Adenocarcinoma**

UK 15 / 100,000 per year, M>F (3:2), peak age 50-70

Highest incidence in Japan (78/100,000).

US (10/100,000)

Pathophysiology

Risk Factors: H.Pylori, GORD, Blood Group A, high salt diet, alcohol, smoking, atrophic gastritis, partial gastrectomy, pernicious anaemia, polyps

E.g. Mechanism:

Normal Mucosa -> H.Pylori ->Acute Gastritis->Chronic Gastritis ->Atrophic Gastritis ->Intestinal Metaplasia

-> Dysplasia -> Gastric Carcinoma

Symptoms:

(Mnemonic WEAPON)

Weight Loss, Emesis, Anorexia, Pain, Obstruction, Nausea.

Signs:

Commonly, weight loss is the only feature but in advanced disease:

50% Palpable epigastric mass, Virchows Node (see below), anaemia, melaena, hepatomegaly, axillary adenopathy, enlarged ovaries, Blumer's shelf. Metastases in 1/3 of patients: ascites, jaundice, hepatomegaly.

Investigations

FBC (Hb for anaemia), LFTS (metastatic spread particularly ALT, AST), **Gastroscopy + biopsy** (8-10 biopsies from ulcer margins), consider brushings for cytology, barium meal is no longer an investigation of choice but still an option (if your consultant keeps asking!) CT for staging TNM system (see below). US esp. endoscopic ultrasound is increasingly used to detect the degree of spread of the tumour and US is also used to view the liver for mets

Management

Disease is often advanced (2/3 in UK at presentation) but if still operable here are the options: Antral tumour-Distal Subtotal Gastrectomy, Midbody and Pylorus – Total Gastrectomy. These are followed up by chemotherapy (Cisplatin +5 Fluorouracil)

Written Exam Tips and Tricks

Proximal tumours are more common than distal tumours and they' tend to be on the lesser curve of the stomach. There are 4 morphological types: ulcerative, polypoid, scirrhous, superficial. Physicians love this: Genetic heterozygous loss of p53 or APC is associated with disease development. TNM staging system :

T = Tumour depth of invasion, N: Lymph node involvement, M: Metastases eg, to distant lymph nodes

Clinical Exam/Ward Round Tips and Tricks

1. Gastric cancer mets to the left supraclavicular fossa known as Troisiers Sign and Virchow's Node (your joker mates will all know this). Time to shine:
2. Blumer's Shelf is when you get a peritoneal mass in front of the rectum and one rectal examination people have decribed this as a shelf (Mr.Blumer I presume...),
3. Sister Mary Joseph's node is a met phenomenon of a periumbilical swollen lymph node,
4. Irish's nodes are swollen lymph nodes in the left axilla (armpit...just checking)
5. Krukenberg tumours are when the gastric or any other tumour mets to the ovaries causing their enlarge

Differential diagnoses: polyp, GORD, PUD, leiomyoma, leiomyosarcoma, (don't forget if a pt comes to A+E (esp. elderly) with epigastric pain to do a cardiac workup and consider other emergencies such as AAA.