GI tract diseases

Apthous ulcer

Diagnostic tools

1. Patient complaint-painful oral ulcer.

2. On examination-deep ulcer with central whitish color.

Management

1. Tab. Prednisolone 5 mg 1 wU ewo wPweqv ai‡eb gy‡L w`‡b 1 evi 2 w`b| (most effective treatment).

2. Rarely patient with very severe recurrent apthous ulcer may need oral steroid.

Other option-amlexanox oral pase can be applied 4 times daily for 7 days.

Hiccup

Primary task to manage hiccup is management of the underlying cause. Common causes of hiccup are -renal failure, hyponatraemia, liver abscess, intestinal obstruction, stroke (as patient is immobile, diaphragmatic irritation by the intestine cause hiccup) etc.

Management

1. Eating 1 TSF dry granulated sugar.

2. Interruption of the respiratory cycle by breath holding, valsalva maneuver or rebreathing into a plastic bag.

3. Irritation of the diaphragm by holding knees to chest.

4. Chlorpromazine is the most effective and first line drug to treat hiccup. But before giving LFT & renal function test should be done. Chlorpromazine may be used orally at 25-50 mg three to four times daily for intractable hiccup. Parenteral therapy can be considered if symptoms persist for 2-3 days (Inj. chlorpromazine 25 mg/ml 1 amp IM stat. & 6 to 8 hourly.

5. Treatment of the underlying cause like treatent of liver abscess, hyponatraemia etc.

Other treatment option

1. Tablet metoclopramide 10 mg 8 hourly.

2. Tablet baclofen 5-25 mg 8 hourly.

3. Benzodiazepines (lorazepam, diazepam).

4. Phenytoin, carbamazepine, gabapentin.

5. Occasionally general anesthesia for intractable hiccup not responding to pharmacological treatment.

Oral candiasis

Diagnostic tools

1. Occurs usually in immunocompromised patient like DM, taking cytotoxic drugs, steroid, old age etc.

2. White patch in tongue and/or oral mucosa.

3. Odynophagia or dysphagia suggests pharyngeal and oesophageal involvement.

Management:

1. Nystatin oral suspenpension 1 wgwj A_ev 15 †dvUv wRnŸvq w`‡eb w`‡b 3 evi 10 w`b|

2. Resistant cases or immunocompromised patient may require oral fluconazole.

Achalasia cardia

Diagnostic tools

1. Patient complaint-dysphagia for long duration (short duration in carcinoma esophagus), more in liquid than solid food.

2. Investigation-endoscopy of upper GIT and barium swallow x-ray.

Treatment options

1. Endoscopic force full pneumatic dilatation (improves symptoms in 80% cases).

2. Endoscopy directed botulinum toxin injection into the lower oesophageal sphincter (induces clinical remission but relapse is common).

3. Surgical myotomy (Heller's operation-laparoscopically or open)- indicated who needs frequent dilatation.

Gastro esophagial reflux disease(GERD)

Diagnostic tools

1. Patient complaint-burning sensation of the chest and regurgitation, often provoked by bending, straining or lying down.

2. 'Water brash', which is salivation due to reflex salivary gland stimulation as acid enters the gullet, is often present.

3. Some patients are woken at night by choking as refluxed fluid irritates the larynx.

4. Recently, a complex endoscopic technique has been developed in specialist centres (peroral endoscopic myotomy, POEM).

Management

1. Lifestyle advice, including weight loss in overweight and obese, avoidance of dietary items which the patient finds worsen symptoms, elevation of the head end of the bed in those who experience nocturnal symptoms, avoidance of late meals and giving up smoking, avoid supine position immediately after taking food.

2. Acid suppression with omeprazole followed by H2 blocker followed by antacids preparations. Who experienced symptoms with step down therapy (from omeprazole to H2 blocker to antacid), omeprazole should be given at lowest dose (10 mg daily).

3. Tablet domperidone 10 mg 8 hourly helpful when dysmotility features are prominent.

4. Patients who fail to respond to medical therapy, those who are unwilling to take long-term PPIs and those whose major symptom is severe regurgitation should be considered for laparoscopic anti-reflux surgery.

Peptic ulcer disease (PUD)

Diagnostic tools

1. Upper abdominal pain-more in empty stomach (duodenal ulcer), more after taking meal (gastric ulcer).

2. On examination- duodenal point tenderness may be present.

3. Investigation-endoscopy of upper GIT-presence of ulcer in duodenum, stomach or lower end of the esophagus. Histopathology of the ulcer-no evidence of malignancy.

Management

1. Avoid tobacco use, aspirin, NSAID.

2. For eradication of H. pylori-amoxicillin + clarithromycin + esomeprazole/rabeprazole kit 1 cvZv mKv‡j I 1 cvZv iv‡Z Lv‡eb 7-14 w`b| Gici Rabeprazole, omeprazol/esomeprazole 20 mg 1wU mKv‡j I 1wU iv‡Z Lvevi 30 wgwbU Av‡M Lv‡eb 2 gvm|

Dc‡`k PUD †ivMxi Rb¨

1| LvIqv-`vIqv mgq gZ Ki‡Z n‡e| mKv‡ji bvস্তা 8 Uvi g‡a¨, `ycy‡iর Lvevi 1Uv †_‡K 2 Uvi g‡a¨, iv‡Zi Lvevi 8 Uvi g‡a¨ Lv‡eb|mKvj I `ycy‡ii gvSLv‡b Ges `ycyi I iv‡Zi gvSLv‡b GKUz মুড়ি ev wPov ev Ab¨ wKQz †L‡j fvj nq|

2| AwZwi³ †Z‡jfvRv Lvevi cwinvi Ki‡Z n‡e|

3| †ewk K‡i cvwb, kvK-mewR †L‡Z n‡e|

4| cvন-mycvix cwinvi Ki‡Z n‡e|

5| Lvevi cici weQvbvq ‡kvqv hv‡e bv| 5-7 wgwbU nvuUvnvuwU K‡i Zvici weQvbvq ï‡evb|

6| e¨_vi Jla Wv³v‡ii civg©k Qvov Lv‡eb bv|

Zolinger- Ellusion syndrome

Diagnostic tools

1. Severe upper abdominal pain, diarrhoea, steatorrhoea.

2. Poor response to ulcer therapy.

3. Endoscopy shows- severe & multiple ulcer in post bulbar duodenum, jejunum & oesophagus.

Management:

1. PPI- larger dose 60- 80 mg daily.

2. Somatostatin analogue- Inj. octreotide subcutenously.

3. If localized tumor (non-beta cell islet tumour of the pancreas ('gastrinoma') found then resection of the tumor.

Non-ulcer dyspepsia (NUD)

Diagnostic tools

1. Age< 40 years

2. Patient complaint anorexia, abdominal bloating, abdominal pain

3. Exclusion of PUD by endosopy of upper GIT

Management

1. Explanation & reassurance.

2. Avoid fatty foods.

3. Domperidone 10-20 mg 8 hourly.

4. H2 antagonist- Ranitidine if night pain or heart burn.

5. Low dose amitryptyline can be given.

Coeliac disease

Diagnostic tools

1. Patient usually present with features of malabsorption.

2. Features of deficiency of iron, folic acid may be predominant.

3. Investigation- endoscopic duodenal biopsy (gold standard), IgA anti-endomysial antibody positive.

Management

1. Correction of iron, folate, calcium and/ or vit-D

2. Avoid glutein containg food for life long (avoid wheat, rye, barly & initially oats)

3. If patient are refractory then treatment with corticosteroid or immunsuppressive agent.

Follow up:

Circulating antiendomycial antibody (after treatment IgA antiendomysial antibody disappear).

Tropical sprue

Diagnostic tools

1. Patients are from tropical countries or history of visit to the tropical country.

2. The condition often begins after an acute diarrhoeal illness.

3. Patient complaint- diarrhoea, abdominal distension, anorexia, fatigue and weight loss, when the disorder becomes chronic, the features of megaloblastic anaemia (folic acid malabsorption) and other deficiencies, including ankle oedema, glossitis and stomatitis are common.

Management

1. Tetracycline 250 mg 6 hourly for 28 days

2. Folic acid 5 mg daily 3 months to 1 year.

Blind loop syndrome

Diagnostic tools

1. Patient has history of underlying condition like hypo- or achlorhydria (pernicious anaemia, partial gastrectomy, long-term PPI therapy); impaired intestinal motility (scleroderma, diabetic autonomic neuropathy and chronic intestinal pseudo-obstruction), structural abnormalities, gastric surgery (blind loop after Billroth II operation), jejunal diverticulosis, enterocolic fistulas (e.g. Crohn's disease), extensive small bowel resection, strictures (e.g. Crohn's disease) and impaired immune function (hypogammaglobulinaemia).

2. The patient present with watery diarrhoea and/or steatorrhoea with anaemia due to B12 deficiency. There may also be symptoms from the underlying intestinal cause.

3. Investigation-serum B12 usually low, barium follow through or small bowel enema may reveal blind loops or fistulas. Endoscopic duodenal biopsies exclude mucosal disease such as coeliac disease.

Management

1. Treatment of the underlying cause or condition.

2. A course of broad spectrum antibiotic for 2 weeks (sometimes up to 4 weeks) is the first-line treatment. Examples include tetracycline (250 mg 4 times daily), metronidazole (400 mg 3 times daily), amoxicillin (250 mg 3 times daily) or ciprofloxacin (250 mg twice daily).

3. In chronic cases vitamin B12 injection IM should be given.

4. If patient with motility disorder such as DM, scleroderma- loperamide 2 mg 4-6 hourly.

Ulcerative colitis

Diagnostic tools

1. Patient present with chronic bloody diarrhoea.

2. Investigation-colonoscopy. In ulcerative colitis, there is loss of vascular pattern, granularity, friability and contact bleeding, with or without ulceration.

3. Exclusion of other causes of chronic diarrhoea.

Active proctitis

Mild to moderate

1st line therapy

1. Mesalazine enema or suppository

2. Oral Mesalazine

3. Topical steroid - who intolarent to topical mesalazine

4. Patient who still fail to respond- oral prednisolone 40 mg daily.

Acute left sided or extensive UC

Mildly active disease

1. High dose aminosalicylates.

2. Topical aminosalicylate or steroid.

3. Oral steroid if aminosalicylate therapy ineffective.

Severe UC

1. Intravenous fluid with nutritional support.

2. Intavenous steroid mehylprednisolone 60 mg daily or hydrocortisone 400 mg daily should be given as a continuous infusion.

3. Topical and oral aminosalicylates.

4. Intravenous ciclosporin or infliximab who do not promptly respond to steroid.

Indication of colectomy

1. Patient who developed colonic dilatation > 6 cm.

2. Those whose clinical & laboratory measurements deteriorate.

3. Those not respond after 7-10 days maximal medical treatment.

Maintainance of remission

Oral aminosalicylates- mesalazine or balsalazine. Sulphalazine has higher side effects but choice in patient with associated arthopathy. Patient who frequently relapses despite aminoslicylate is treated with thiopurines.

Irritable bowel syndrome (IBS)

Diagnostic tools

1. Patient complaint-chronic diarrhoea, defecation after talking meal, abdominal bloating, constipation etc. but appetite is normal, no nocturnal symptom, no rectal bleeding and no weight loss. Patient may have diarrhoea or constipation or pain and bloating predominant symptom.

2. Investigation- to exclude other causes e.g. stool R/E, endoscopy, colonoscopy, USG of whole abdomen etc.

Management

Diarrhoea predominant

1. Reassurance.

2. Avoid legumes & excessive dietary fiber.

3. Still symptomatic -loperamide 2-8 mg daily.

4. Still symptomatic- amitriptyline or imipramine 10–25 mg at night and rifaximin 600 mg daily for 2 weeks.

5. Still symptomatic-

i) Duloxetine 30–60 mg at night ii) Relaxation therapy

iii) Biofeedback iv) Hypnotherapy

Constipation predominant

1. Reassurance

2. High roughage diet

3. Still symptomatic- ispagula, lactulose

4. Still symptomatic-prucalopride or linaclotide

5. Still symptomatic-

i) Duloxetine 30–60 mg at night ii) Relaxation therapy

iii) Biofeedback iv) Hypnotherapy

Pain & bloating predominant

1. Dietary changes-low-FODMAP diet, exclude wheat, exclude dairy, gluten-free diet.

2. Still symptomatic-use spasmolytic drugs like mebeverine, peppermint oil, hyoscine, probiotics, rifaximin 600 mg daily for 2 weeks, amitriptyline or imipramine 10–25 mg at night.

3. Still symptomatic-

i) Duloxetine 30–60 mg at night ii) Relaxation therapy

iii) Biofeedback iv) Hypnotherapy

Constipation

Causes of constipation are low dietary fiber intake, drugs e.g. iron, opioid, propanolol, amitryptylline etc, hypothyroidism, intestinal obstruction, parkinsonism, immobility (e.g. stroke patient), IBS.

Management

1. Main treatment is identify and treatment of the cause. Examples- avoid drugs like amitryptylline, iron supplements, aluminium containing antacids etc, treatment of intestinal obstruction, hypothyroidism, parkinsonism etc.

2. Bisacodyl, lactulose, stool softner e.g. milk of magnesium can be used.

Following advice can be given in constipation

1| †ewk K‡i cvwb (cÖwZw`b 2 wjUvi) Lv‡eb|

2| †ewk K‡i kvK-mewR Lv‡eb|

3| ‡cu‡c ev †cu‡ci ZiKvix, gmyi Wvj Lv‡eb|

4| cÖwZw`b 30 wgwbU nvuU‡eb|

Proton pump inhibitors (PPIs)

PPIs are one of the most commonly prescribe drug in daily practice. Usually PPIs are well tolerated and most of the adverse effects are mild and transient; but some of the adverse effects are depend on duration of use of these drug. Following PPIs-omeprazole, pantoprazole, rabeprazole, lansoprazole and esomeprazoleare available in the market. There is little or no extra benefit between individual PPIs.

Long-term maintenance therapy require in preventing NSAID/aspirin-induced ulceration, gastro-oesophageal reflux disease and the recurrence of oesophageal strictures.

Following are the FDA approved indication of use of PPI and their duration of therapy

Indications	Duration of therapy
Acute gastric and duodenal ulcer	4-8 weeks
Maintenance of healed duodenal ulcer	Unknown
Symptomatic GERD	4 weeks (omeprazole) or 8 weeks (lansoprazole)
Erosive esophagitis	4-8 weeks
Maintenance of erosive esophagitis	Unknown

Zollinger-Ellison syndrome	Several years
NSAID-induced gastric ulcer prophylaxis	Duration of NSAID
NSAID-induced gastric ulcer	4-8 weeks
Eradication of Helicobacter pylori	7-14 days with triple antibiotic

Safety of long-term therapy

Common adverse effects, observed in up to 10% of patients, are headache, diarrhoea, gastrointestinal upset, constipation and flatulence. Rare but important adverse events include acute interstitial nephritis, hyponatraemia, hypokalaemia, hypomagnesaemia , pancreatitis and Stevens-Johnson syndrome. There are reports of an increased risk of pneumonia and Clostridium difficile colitis in long-term users of PPIs.

Gastric atrophy and cancer

Long-term use of PPIs leads to achlorhydria or hypochlorhydria, so the carcinogen taken with foods cannot be inactivated, this may lead to development of carcinoma stomach.

Enteric infection

Achlorhydria and hypochlorhydria increase the risk of enteric infections particularly with Clostridium difficile.

Malabsorption

A recent case control study found a higher incidence of hip fracture among long-term PPI users due to hypocalcaemia. Besides acid suppression therapy may inhibit B 12 absorption as ingested B 12 is protein bound and its release from foods is facilitated by gastric acid.