
UNIT 1 COMMON CONDITIONS -1 – GASTRO INTESTINAL SYSTEM

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1.0 INTRODUCTION

In this unit, the focus is on conditions related to GI system like pain, nausea, vomiting, diarrhoea, constipation, jaundice, GI Bleeding (Upper Gastrointestinal (GI) bleeding and Bleeding Per Rectum), abdominal distension, dysphagia, dyspepsia and ulcer. Human beings suffer from day to day minor issues commonly rather than life threatening conditions or rare syndromes every day.

In primary care centres, patients will not present with a text book diagnosis written on their faces like amoebic diarrhoea, peptic ulcer or colon cancer etc. They present with certain symptoms which have to be analysed with the clinical signs based on our theoretical knowledge and practice skills. So, it is important to understand some of the common symptoms with which the patients are most likely to present in primary care settings where there is no access to major investigations or sometimes even the doctors may not be available.

1.1 OBJECTIVES

After completing this unit, you should be able to:

- identify the signs and symptoms of common GI disorders;
- enumerate common GI problems;
- enumerate the emergency and critical issues related to GI disorders; and
- provide primary care to the patients with GI problems.

1.2 PAIN

Pain is a warning created by nature for the living beings to look into the reasons responsible for it (the disease process). Hence, you should never ignore it, as this is the commonest symptom which brings a patient to you. History is important acute pain (pain of recent onset) is the most disturbing symptom and needs urgent attention. This is also the most rewarding problem to be solved by any practitioner when patient not only acquires smile on his face but also gets you a lot of appreciation, recognition and the most important being the satisfaction. Let us discuss assessment of pain in detail as given below:

1.2.1 Assessment of Pain

Pain is a subjective feeling. Assess the pain with respect to onset, the aggravating and relieving factors, quality, its radiation, severity and whether the patient has taken any earlier treatment. Pain can be assessed as per the acronym 'OPQRSTUV' as shown in Table 1.1.

Table 1.1: Pain Assessment using the Acronym "O, P, Q, R, S, T, and U"

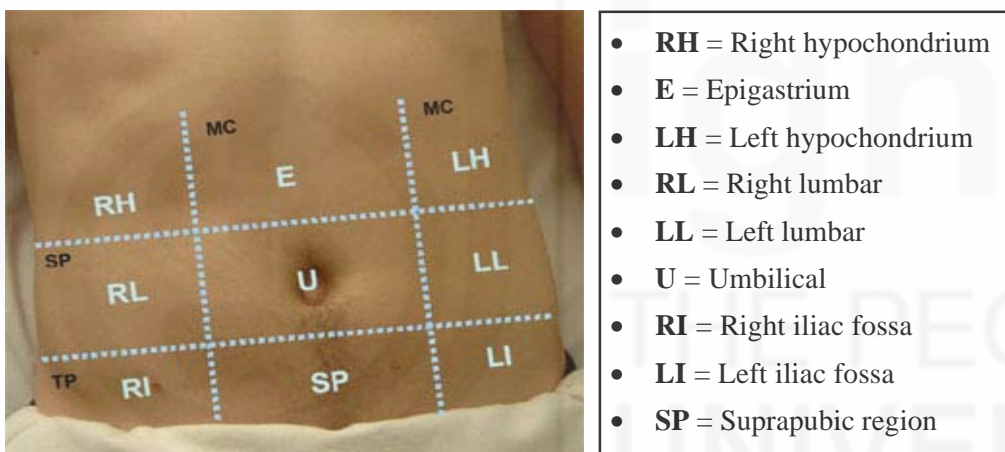
Pain Assessment Acronym	Description
O-Onset	When did it begin? For how long does it last? How often does it occur? (duration of symptoms)
P-Provoking and palliating	What brings it on? What makes it better? What makes it worse? (aggravating and relieving factors)
Q-Quality	What does it feel like? Can you describe it?
R-Region or radiation	Where is it? Does it spread anywhere?
S-Severity	What is the intensity of this symptom? (Use a grading from 0-10, a visual analogue scale, or facial expression scale). How bothered are you by this symptom? Are there any other symptoms that accompany the pain ?

Pain Assessment Acronym	Description
T-Treatment	What medications and treatments are you currently using? How effective are these? Are there any side-effects from the medications and treatments? What medications and treatments have you used in the past?
U-Understand how it impacts on you	What do you believe is causing this symptom? How is this symptom affecting you and your family?

1.2.2 Identify the Site of the Pain

Identification of the site of pain is very important clue to the cause of pain. (Fig. 1.1, Box 1)

Box 1.1



- **RH** = Right hypochondrium
- **E** = Epigastrium
- **LH** = Left hypochondrium
- **RL** = Right lumbar
- **LL** = Left lumbar
- **U** = Umbilical
- **RI** = Right iliac fossa
- **LI** = Left iliac fossa
- **SP** = Suprapubic region

Fig. 1.1: Regions of abdomen

- **Pain in right hypochondrium:**
 - Radiating to shoulder or infra scapular area: It could be because of gall bladder, diaphragmatic irritation. It could be base of lungs (pneumonia), inflammation of liver (hepatitis) etc. also. Pneumonia presents with fever, cough, hemoptysis etc. Hepatitis can have anorexia, nausea, vomiting, fever etc. (prodrome) followed by yellow discoloration of eyes, skin, urine etc. while prodromal symptoms may be disappearing. Do not forget to look at the skin, it may be herpes. Any skin infection, cellulitis, muscle related pain should not be ignored.
 - Shifting towards midline (epigastrium): It could be related to stomach. Gastritis is the commonest cause of pain in this area. Drugs, viral infections and simply acid related issues are the commonest reasons. Palpable and tender left lobe of liver could be liver related, the commonest being hepatitis and amoebic liver abscess. Severe pain radiating to back could very well be from pancreas.

- **Pain in left hypochondrium** in acute febrile illness or trauma could be a tender splenic aetiology or relate to chest cage. More common causes of left hypochondrial pain in practice are not due to splenic causes but rather issues related to chest wall, lungs, stomach etc.
- **Pain in any side of lumbar area** if radiating to renal angle and /or groin is related to renal/ureteric causes. The commonest in day to day practice is renal stones. If the pain is atypical or mainly towards the back, the cause may lie with vertebral column (the commonest reasons being postural and wear & tear).
- **Pain in the central abdomen (umbilical area)** points towards small intestine or peritoneal cavity. The most problems are day to day infections caused by bacteria. Tenderness, rigidity and a sick looking patient may be due to peritonitis, requiring urgent specialised intervention and so referral in time.
- **Pain in lower abdomen, either side are iliac fossae** (appendix and caecum on right, colon on left and adenexa on either side in women).
- **Suprapubic pain** could be related to urinary and uterine causes.

1.2.3 Management of Pain

Management of pain depends upon the underlying condition. For the severe episodic spasmodic pain antispasmodics can be given. Analgesics can be given to tide over the situation depending upon the severity and response to the given drugs.

Pharmacological measures

- Hyoscine Butylbromide: 10 mg tablet, 20 mg injection 3 to 4 times a day for colicky pains (Ureteric, intestinal, biliary).
- NSAIDs (non-steroidal anti-inflammatory drugs) such as diclofenac (intramuscularly as a dose of 50 mg or 75 mg) or ibuprofen are used.

Remember :

NSAIDs should never be used during pregnancy.

- Pentazocine or morphine can be administered to manage emergency severe pain not responding to NSAIDs and antispasmodics. Morphine is often not recommended because of its' addictive nature. Morphine can be used intravenously or subcutaneously.
- Pethidine: 50 mg to 100 mg (equivalent to 5 mg to 10 mg of morphine.)
- Tamsulosin or other alpha blockers can be used for ureteric colic.
- In pregnant women, morphine is better than NSAIDs

Non pharmacological measures: Local heat (taking care to avoid burns) will help to give relief, may be temporary measure.

1.2.4 Referral of the Patient

The patient with severe pain not responding to treatment and if there is tenderness, rigidity, tachycardia, tachypnea, hypotension should be immediately referred to the higher health care centres.

1.3 NAUSEA AND VOMITING

Nausea and vomiting could be a part of stomach related problems like gastritis or obstruction, and these can also be non specific features of any systemic illness.

Vomiting associated with abdominal distension and constipation may be a symptom of intestinal obstruction requiring immediate hospitalisation.

Diagnosis

- There could be many reasons for nausea and vomiting. Try to identify the cause while starting with the symptomatic treatment.
- The various causes may be vertigo, some GI problem, systemic illness, early pregnancy, renal failure etc.
- Ask the patient if vomiting is associated with nausea, abdominal pain, diarrhoea, food intake, certain drugs etc.

Pharmacological treatment

Stable patients need oral symptomatic treatment, while sick patients will need injectable symptomatic treatment and IV fluids.

- Hospitalise the patient to give intravenous fluids in case of dehydration.
- Start oral fluids as soon as the patient can tolerate or even initially in stable patients.
- Administer appropriate antispasmodic and /or analgesics if patient has pain.
- Injection/tab ondansetron 8 mg IV/orally. Repeat 6 to 8 hourly if needed. or Injection/tab metoclopramide 10 mg IM, repeat after 6 to 8 hours if needed. or Tab domperidone 10 mg three times a day.
- In pregnancy avoid all drugs, if possible. Tablet/injection promethazine 25 mg is safe in the first trimester.
- If there is history of motion sickness then give Tab cyclizine 50 mg 3 times daily.
- Domperidone: (10 mg tablets, syrup) 10 to 20 mg taken 3 to 4 times a day before meals. Do not take more than 8 tablets (80 mg) in 24 hours. For children: 0.25 – 0.5 mg per kg bodyweight taken 3 to 4 times a day before meals.
- Metocloperamide: (10 mg tab and injections) 10 to 15 mg orally up to 4 times a day 30 minutes before meals. 10 mg IV (slowly over a 1 to 2 minute period)
- Levosulpiride: (25 mg tablets and injections): can be taken three times a day before meal.

Health education

- Avoid stale food, cut vegetables/fruits kept in open.
- Drink potable water only.
- Avoid NSAIDS, especially if ulcer symptoms are present for any vomiting/epigastric pain.
- Prevent dehydration. Encourage patients to take oral fluids frequently to prevent dehydration.

Referral: Immediately refer the patient if

- Dehydrated
- In shock

- Known diabetic or patient with glycosuria / hyperglycaemia.
- Septicaemia
- Jaundiced or unstable (simple acute viral hepatitis can be managed on OPD basis).
- Showing signs of intestinal obstruction, i.e. no stool or flatus passed with distension, vomiting
- Presenting with abdominal tenderness with guarding and rigidity
- Vomiting with fresh blood (not responding to routine measures).

Check Your Progress 1

i) Identify the site of the pain.
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ii) Explain Pain in left hypochondrium.
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iii) Diagnose Nausea and vomiting.
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1.4 DIARRHOEA

Most common diarrhoeas are self limiting illnesses where taking care of hydration with oral fluids preparations and administration will belive symptoms.

Let us discuss Common problem which cause diarrhoea are cholera, dysentery as given below.

1.4.1 Cholera

Cholera is usually very acute severe watery diarrhoea. It occurs due to the infection with the bacteria *Vibrio cholera*. The main danger is rapid and severe dehydration. The suspected cases are to be notified.

Clinical features: The various clinical features are:

- Acute watery diarrhoea
- No blood in stool
- No mucous in stool
- No specific faecal odour
- Stool is often gray and turbid (rice water stool)
- Possible vomiting
- Severe dehydration which can have a rapid onset, can be severe, and is potentially fatal
- Possible shock

Assessment of the patient

- Obtain thorough history of the patient especially history of other cases in family, neighbourhood, or common water sources.

Management

The objectives of management are to:

- treat and prevent dehydration
- prevent spread to other people (inform authorities)
- notify the condition
- Plenty of oral rehydration solution (ORS) to prevent dehydration and possible shock. ORS-2200–4000 ml in the first four hours, plus as much water as they want in addition to ORS, till the symptoms of dehydration disappear.
- No antibiotic
- Maintain intake/output chart.
- Assess for dehydration as given in Table 1.2.
- IV fluids (dextrose 5% in sodium chloride 0.9%) may be started as per requirement.
- Check vital signs accurately two hourly. The duration of checking the vital signs may be increased or decreased depending upon the condition of the patient.

Rice water stools, well described for cholera usually need only fluids. However if patient has pulse rate of more than 100/minute, dry tongue, decreased urine output, sunken eyes or when the patient looks sick: all these signs are indicative of hospitalisation and parenteral treatment. But before referring these patients, make a point to put an IV cannula and hydrate them well with Ringer's lactate, as this can save a lot of lives.

Table 1.2: Assessment of Dehydration

Chief Complaints	Mild Dehydration	Severe Dehydration
Patients' appearance	Thirsty, alert, restless	Drowsy, cold, sweaty
Radial pulse	Normal rate and volume	Rapid, feeble, sometimes impalpable
Blood Pressure (mm of Hg)	Normal	<80, may be unrecordable
Skin elasticity	Pinch retract immediately	Pinch retract slowly (more than 3 seconds)
Tongue	Moist	Very dry
Urine flow	Normal	Little or none
Estimated fluid deficit	40-50 ml/kg	100-110 ml /kg

Prevention

Advise the use of good individual and general hygiene practices:

- Hand washing with soap before handling food and after toilet use

- Boil water before drinking
- Use of safe latrines

Referral

- Severely ill patients (shock, anuria, altered sensorium)
- According to local policy.

Let us discuss, dysentery which can be bacillary or amoebic in nature.

1.4.2 Bacillary Dysentery

Bacillary Dysentery is the acute infection of the bowel usually caused by *Shigella*.

Assessment

Check for sudden onset of diarrhoea with the following:

- Blood in stool
- Mucous in stool
- Fever
- Often abdominal cramps
- Toxic appearance
- Possibly associated convulsions
- Lethargy

Management

- Prevent and treat dehydration.
- Start Tablet Ciprofloxacin 500 mg 12 hours for 5 days. (Contraindicated in pregnant women)

Follow-Up

- Ask the patient to come for follow up after 48 hours / SOS.
- Ask for the relief of symptoms.
- If she/he shows no improvement, switch to the other first-line antibiotic or to metronidazole.

Referral

- All cases with serious general symptoms, or not responsive to treatment after 48 hours.
- Malnourished patients.
- Severely dehydrated patients.
- Patients with comorbidities.

Health education

- Hand washing with soap before handling food and after toilet use
- Hand washing with soap after handling sick babies and children
- Washing soiled garments and bed clothes with soap
- Using safe latrines

1.4.3 Amoebic Dysentery

Amoebic dysentery is a condition characterised by diarrhoea caused by *Entamoeba histolytica*.

Assessment

Check the diarrhoea with the following:

- Blood in Stool
- Mucous in Stool
- Unpleasant odour
- Usually without fever
- May alternate with constipation, flatulence or both.
- If possible, a fresh stool examination (three specimens) will confirm live forms or cysts. For stool specimen collection refer BNSL-043, Block 2, Unit 2.

Management

- Rehydrate the patient with oral and/or IV fluid.
- Provide nutritional support.
- Prescribe metronidazole.

Referral

- Failure to respond to treatment
- For laboratory confirmation
- Worsening condition

Most common diarrhoeas are self limiting illnesses where taking care of hydration with oral fluids with oral hydration preparations will suffice. Blood in stool may be just Haemorrhoids (terminal bleed at the end of stools and not mixed with stools). Treat the diarrhoea. Haemorrhoids can be managed as per protocol. Large amount of blood mixed with stools with frequent stools will require hospitalisation and further evaluation. Bacillary and amoebic diarrhoeas can be diagnosed with stool routine and culture examinations and have to be treated with antibiotics (ofloxacin, ciprofloxacin, amikacin, ceftriaxone etc) and metronidazole respectively. Chronic diarrhoeas can usually be managed on OPD basis with investigations. Chronic haemorrhoidal blood loss presents not infrequently with anaemia and needs appropriate management.

1.5 CONSTIPATION

Constipation is a change in the usual bowel habits. It is defined as decrease in frequency and liquidity of stool as compared to the normal pattern in a particular individual. The usual complaints of the patients are straining at defecation >25% of time, lumpy/hard stools, sensation of incomplete evacuation, or less than 3 bowel actions per week.

Constipation like any other symptom can be diagnosed with history and clinical examination.

Causes of Constipation

Various causes of constipation include:

- consuming low fiber diet and less fluid
- lack of exercise
- pregnancy
- old age
- side effects of certain drugs
- metabolic, endocrine, neurogenic causes, lower bowel abnormalities
- psychogenic disorders
- chronic use of enemas and laxatives
- cancer of the bowel
- ignoring the urge of passing stool
- change in environment etc.

Each cause needs to be looked into and corrected accordingly.

Chronic constipation may be a problem both for the patient and practitioner. Poor oral intake and its causes need to be looked into. These may vary from ill fitting denture to loneliness in elderly, non availability of food, poor intake of high roughage diets because of ignorance or bad eating habits. Any illness resulting into poor oral intake can cause constipation which can usually be managed with improved oral intake with roughage and promotion of fluid intake. Restriction of intake is not always due to anorexia alone, but many myths stopping oral intake by patient during illness is a frequent underlying cause.

Recent onset constipation, bleeding per rectum, anorexia and weight loss may be due to colonic malignancy. Hypothyroidism in elderly, especially females is not an uncommon aetiology of poor appetite and constipation. Laxatives, stool softeners and enemas at appropriate place will do the trick.

Assessment

- A thorough assessment of the patient is important.
 - Note the possible causative factors of constipation.
 - Duration and severity of problem.
 - What all interventions the patient has tried and their outcome.
 - Acute constipation associated with vomiting and if the patient has not passed even wind and appears ill, GIT obstruction may be suspected. These patients need to be referred immediately to a higher centre.

Non-pharmacological treatment: Health education plays a vital role for the individual as well as society at large. The non-pharmacological interventions should be tried first before moving on to laxatives.

- Advise high fiber diet (vegetables, salad, fruits, bran) and increased intake of fluid.
- Decrease the consumption of caffeinated drinks.
- Avoid suppression of urge to defecate.
- Make a regular bowel habit.

- Bulk forming agents like ‘isapghula husk’ also help to relieve mild constipation.
- Advise regular physical exercise such as walk for 1/2 to 1 hour daily and abdominal exercises.
- Discourage the continuous use of laxatives.

If the constipation is resolved, ask the patient to continue with these measures.

Pharmacological treatment: If there is no response with the above said non-pharmacological measures, then try the following pharmacological measures

- Lactulose 15–20 ml orally at night. Or Susp. magnesium sulphate 15–20 ml at night.

Or Tab sodium picosulphate 10 mg at night. Or

- Isotonic polyethylene glycol (PEG) electrolyte solution 125–250 ml.

Any of these may be given 2–4 times a week. The dose can be decided as per the adequate relief.

- Phosphate enemas to be used on as and when required basis in patients having acute problem with severe constipation or sub-acute intestinal obstruction.

For symptomatic patients, laxatives and enema may be all that is required to relieve the acute constipation.

When to refer?

- If the patient has not passed stool or wind in the past 24 hours plus there is abdominal pain, distension and vomiting.
- If the patient continues to have severe constipation or symptoms get worsen.
- Any acute constipation—especially with vomiting, abdominal pain. Suspect acute abdomen.
- Acute or chronic constipation not responding after 2 weeks – suspect malignancy.
- Constipation due to intestinal obstruction as mentioned earlier will need urgent referral with IV fluids and Ryle’s tube by an experienced practitioner well versed with these problems.

Check Your Progress 2

i) Explain clinical features of Cholera.

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ii) Diagnose Bacillary Dysentery.

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iii) Causative agents of Amoebic Dysentery.

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1.6 JAUNDICE

Jaundice of recent onset with anorexia, nausea, vomiting may be very typical of acute viral hepatitis where management is with normal diet and symptomatic domiciliary care. (Various traditional ways, faith healing and myths are responsible most of the morbidity and need to be strongly discouraged). Patients with fever, vomiting, altered sensorium or bleed will need specialised care. Jaundice with right hypochondrial pain may be related to gall stones and needs investigation and appropriate treatment. Asymptomatic jaundice will need evaluation to rule out a hepatobiliary malignancy.

Viral hepatitis is an infection of the liver caused by hepatitis A virus (HAV), hepatitis E virus (HEV), hepatitis B virus (HBV), and hepatitis C virus (HCV). Hepatitis A and E are typically caused by ingestion of contaminated food or water. Hepatitis B, C and D usually occur as a result of parenteral contact with infected body fluids. All hepatitis viruses can cause acute hepatitis. Viral hepatitis types B and C can cause chronic hepatitis.

Clinical features of viral hepatitis :

- Fever, Chills, Headache
- Fatigue, Generalised weakness
- Body pain
- Anorexia
- Nausea
- Vomiting
- Dark urine
- Jaundice

Diagnosis of acute viral hepatitis is often easy, but diagnosis of chronic hepatitis **can be difficult as patient usually presents with non-specific symptoms.** When a patient reports symptoms of fatigue, nausea, abdominal pain, darkening of urine, and jaundice, the diagnosis of acute viral hepatitis is likely and can be confirmed by blood tests. On the other hand, patients with chronic hepatitis due to HBV and HCV often have initially no symptoms or only mild non-specific symptoms such as chronic fatigue. Typically, these patients do not have jaundice until the liver damage is advanced. Therefore, these patients can remain undiagnosed for years to decades. In the later stages they can present with oedema, ascites, GI bleed (Hematemesis &/or malena) or altered sensorium (hepatic encephalopathy) etc.

Management

Treatment of acute viral hepatitis and chronic viral hepatitis are different. Treatment of acute viral hepatitis involves rest if required, relieving symptoms and maintaining adequate intake of fluids plus normal balanced diet. Treatment of chronic viral hepatitis involves medications to eradicate the virus and taking measures to prevent further liver damage.

Acute hepatitis

- In patients with acute viral hepatitis, the initial treatment consists of relieving the symptoms of nausea, vomiting, and abdominal pain (supportive care).

- Careful attention should be given to medications, which can have adverse effects in patients with abnormal liver function (for example, acetaminophen, alcohol etc.).
- Only those medications that are considered necessary should be administered since the impaired liver may not be able to eliminate drugs normally, and drugs may accumulate in the blood and reach toxic levels.
- Moreover, sedatives and “tranquilizers” are avoided because they may accentuate the effects of liver failure on the brain and can precipitate hepatic encephalopathy. The patient must abstain from drinking alcohol, since alcohol is toxic to the liver.
- Patients with severe nausea and/or vomiting or altered sensorium etc. may need to be hospitalised for treatment and intravenous fluids.

Prevention

Improved sanitation, food safety and immunisation are the most effective ways to combat hepatitis A.

The spread of hepatitis A/E can be reduced by:

- Vaccine against Hepatitis A is available now.
- Control of infection at source of infection. This requires notification and contact tracing.
- Good hygiene and sanitation are of fundamental importance.
- Tap water should be avoided in high-risk areas. There should be adequate supplies of safe drinking water.
- Public education about transmission and prevention are needed, particularly in communities where HAV is endemic.
- There should be system of proper disposal of sewage within communities.
- There should be good personal hygiene practices such as regular hand-washing with safe water.

1.7 GASTROINTESTINAL (GI) BLEEDING

Let us discuss upper GI bleeding in detail as given below:

1.7.1 Upper Gastrointestinal (GI) Bleeding (Haematemesis)

Upper GI bleed remains a major medical problem. Various causes may include esophageal, gastric, duodenal ulcer, varices, tumours, vascular lesion etc.

It needs stabilisation of the patient before referral for endoscopy to ascertain the cause and treatment thereof. Not to forget that many small oral bleeds may be related to dental, nasal and throat related issues where proper history and a clinical examination is all that is required to refer the patient to the right clinician saving unnecessary harassment to the patient saving valuable time and other resources.

Remember:

Refer the patient to higher facility as soon as possible saving valuable time.

Signs and Symptoms

- Hematemesis &/or malena
- Coffee ground gastric aspirate
- Pain
- Hypovolemic shock
- Tachycardia
- Hypotension

Assessment: The signs of significant bleed are:

- **Vital signs:** BP < 90 mm Hg, HR > 100 beats/min.
- **Skin:** Pale, diaphoretic, Cold, clammy.
- **Cardiovascular:** weak, thready pulse; capillary refill > 3 sec

Management

Acute GI bleed is an emergency and needs active management. An assessment of severity of bleed should be done immediately. Severity of GI bleed is assessed as mild (patient has tachycardia but blood pressure is maintained), moderate (tachycardia with postural hypotension, tachypnoea, sweating, cold skin) and severe (hypotension and shock).

- 1) Check the blood pressure and pulse immediately as soon as the patient is brought to the centre.
- 2) Assess the airway, breathing, and circulation. Protect the airway with intubation to avoid respiratory compromise from aspiration of blood, especially in patients with altered mental status.
- 3) Provide oxygen as needed, and begin cardiac monitoring.
- 4) Insert atleast two large-bore IV cannulas and administer Ringer's lactate solution to maintain mean arterial pressure at 60 mm Hg or higher. Do not use normal saline for patients with liver disease, as it may lead to ascites. instead of saline use other fluids.
- 5) Be sure to monitor respiratory status closely as you administer fluids, and keep the head end of the bed elevated.
- 6) Obtain blood samples for laboratory tests, including haematocrit, haemoglobin, and coagulation studies, as well as for typing and cross matching for packed red blood cells. Arrange six units of packed cells if bleeding is significant.
- 7) Insert nasogastric tube for the drainage of stomach contents and other measures, such as rapid fluid resuscitation and gastric lavage which may be required if bleeding is severe.
- 8) Catheterize patient for the proper monitoring of the urine output.
- 9) If the patient is conscious, ask him/her about previous episodes of bleeding, dyspepsia, and jaundice, and intake of alcohol and drugs.
- 10) Once the patient has been stabilised, refer him for further management.

Subsequent follow up after referral is equally important as the underlying cause may require long term medication for variable duration to prevent subsequent episodes of GI bleeds.

1.7.2 Bleeding Per Rectum (Haematochesia)

It is commonly due to benign anorectal causes and evaluation by anorectal clinician will clinche the diagnosis. Haemorrhoids and fissures are the common diseases. Amoebic, basillary and other infective diarrhoea are next common conditions associated with bleeding. A relatively chronic diarrhoea with blood in stools could also be due to ulcerative colitis which is diagnosed with colonoscopy and confirmed with biopsy. Blood in stool especially in elderly with or without any other symptoms needs malignancy to be ruled out.

Give symptomatic management and refer the patient to the higher centre for further management.

1.8 DISTENSION OF ABDOMEN

Distension of abdomen when acute needs urgent evaluation. Acute pain with toxic symptoms could be due to intestinal perforation or peritonitis where abdomen is tender, with rigidity and rebound phenomenon. Intestinal obstruction will be associated with constipation, pain and vomiting. Sub-acute to chronic distension can be due to ascites. Cirrhosis of liver and tuberculosis are very common in our society. Malignancies can be diagnosed in most of the cases using ascitic fluid analysis, ultrasound, CT scan and tissue biopsy/ FNAC where required.

Give symptomatic management and refer the patient to the higher centre for further management.

1.9 DYSPHAGIA AND DYSPEPSIA

We shall now discuss the components of Dysphagia and Dyspepsia as given below:

1.9.1 Dysphagia

It needs prompt investigation in the form of oropharyngeal examination followed by upper GI Endoscopy to know the exact cause of the difficulty in swallowing. Simple throat inflammation to peptic stricture and malignancies are too frequent in clinical practice that treating these patients without diagnosis must be discouraged. However difficulty to swallow in day to day practice will be due to throat infection, inflammation due to allergy &/or acid reflux with psychological causes adding their own number to patient population in routine OPDs.

Give symptomatic management and refer the patient to the higher centre for further management.

1.9.2 Dyspepsia

Dyspepsia is a non-specific group of symptoms rather than one predominant symptom. It is a functional disease of the upper gastrointestinal tract.

Diagnosis

The patients usually complains of the following symptoms. The symptoms most often are aggravated by eating.

- Epigastric burning pain
- Early satiety
- Feeling of fullness after eating
- Abdominal bloating
- Loss of appetite
- Nausea
- Regurgitation (burping up food or liquids)
- Burping

This could be one of the symptoms of the diseases like gastroesophageal reflux disease (GERD), irritable bowel syndrome, gastric ulcer or duodenal ulcer, lactose intolerance, cholecystitis etc. Routine investigations, thyroid profile, Ultrasound abdomen and upper GI endoscopy will usually diagnose the underlying structural causes if any.

Pharmacological treatment

Treatment depends upon the causative factor. If specific causes have been ruled out, advise certain non pharmacological interventions discussed later.

- Cap Omeprazole 20 mg once a day 45 minutes before breakfast for 4 to 6 weeks or
- Tab Ranitidine 150 mg twice a day 45 min. before breakfast and dinner for 4 to 6 weeks.
- Antacids 2 to 3 teaspoon or 2 tabs (chewable) whenever symptomatic despite above medication.

For those with dysmotility symptoms,

- Tab Domperidone 10 mg three times a day 30 minutes Before breakfast, lunch and dinner
- Duration: Short courses of therapy (4 to 6 weeks) of the drug may be repeated or a long-term treatment may be continued for up to a year. Intermittent therapy or biweekly PPI is also recommended in those requiring long-term treatment
- Anti-*H.pylori* treatment is recommended for those on long term NSAIDs or those with Duodenal/ gastric ulcers (complicated e.g. bleeding). Combination of Cap omeprazole 20 mg twice a day with Cap Amoxicillin 500 mg thrice a day with Tab Metronidazole 400 mg thrice day for two weeks, followed by Cap Omeprazole 20 mg once a day for four to six weeks.

Health education

- Avoid excess tea, coffee, fried food items
- Stop alcohol and smoking.
- Avoid spicy food.
- Avoid unnecessary NSAIDs: Prefer paracetamol especially those with ulcer like symptoms or those with documented duodenal/gastric ulcer.
- Follow meals at regular intervals.
- After having meal, wait for 2 to 3 hrs before lying down.
- It is better to eat several small meals instead of two or three large meals.
- Do not eat late night snacks.
- Maintain optimum weight.

1.10 APHTHOUS ULCERS

Aphthous ulcers are the most common oral mucosal lesions in the general population. These are rounded ulcer with yellowish gray fibrinoid centre. These are quite painful. These ulcers have recurrent appearance even after successful treatment

Diagnosis: Before starting medications for aphthous lesions, it is important to determine the causes which are contributing to the disease. The various causes could be

- Recurrent trauma from tooth/denture.
- Sometimes aphthous ulcers can be the sign of systemic diseases, so it is essential to establish a correct diagnosis to determine suitable therapy.

Non-pharmacological treatment

- Advise adequate oral hygiene.
- Rinse the mouth with plain water especially after eating any thing.

Pharmacological treatment: Various treatment modalities may be used, though there is no definitive therapy.

- Advise symptomatic treatment with application of any gel containing local anaesthetic before taking meals (for relief of meal related pain).
- Topical medications, such as antimicrobial mouth-washes and topical corticosteroids (dexamethasone, triamcinolone, fluocinonide, or clobetasol), can be used to reduce pain and to improve healing.
- Systemic medications can be tried if topical therapy is ineffective.

Health education

- Maintain good oral hygiene.
- Avoid precipitating factors, if any.
- Ensure toothbrush has aligned and soft bristles.
- Avoid chewing betel leaf and other condiments, excessive carbonated drinks and spicy or sharp/crispy foods.
- Take plenty of green leafy vegetables.

Check Your Progress 3

i) Define Viral hepatitis.

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ii) List signs and symptoms of upper gastro intestinal bleeding.

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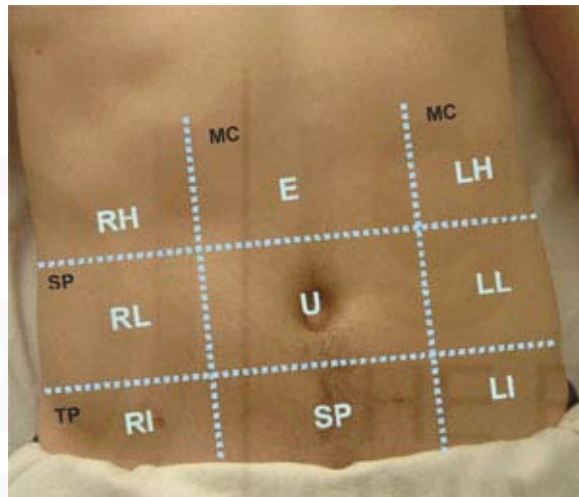
1.11 LET US SUM UP

Practice doesn't make a man perfect, rather proper practice makes a man perfect. So it is of paramount importance to make most of the learning from our teachers during formal learning not only in the initial years when we least understand the subject but also subsequently during any possible opportunities when we start understanding both the diseases as well as the life. Nothing can replace regular learning and updating when we start understanding the medical subjects in the real life. Thus during the service, we must not miss the opportunities to attend trainings and visit higher institutes of learning. Let us try to revise and understand some of the common symptoms with which the patients are most likely to present to us when we are working in primary care settings where we have no investigations, doctors etc. available to guide us.

1.12 MODEL ANSWERS

Check Your Progress 1

i) Identification of the site of pain is very important clue to the cause of pain.



- **RH** = Right hypochondrium
- **E** = Epigastrium
- **LH** = Left hypochondrium
- **RL** = Right lumbar
- **LL** = Left lumbar
- **U** = Umbilical
- **RI** = Right iliac fossa
- **LI** = Left iliac fossa
- **SP** = Suprapubic region

ii) Pain in left hypochondrium in acute febrile illness or trauma could be a tender splenic aetiology or relate to chest cage. More common causes of left hypochondrial pain in practice are not due to splenic causes but rather issues related to chest wall, lungs, stomach.

iii) Diagnosis

- There could be many reasons for nausea and vomiting. Try to identify the cause while starting with the symptomatic treatment.
- The various causes may be vertigo, some GI problem, systemic illness, early pregnancy, renal failure etc.
- Ask the patient if vomiting is associated with nausea, abdominal pain, diarrhoea, food intake, certain drugs etc.

Check Your Progress 2

i) Clinical features: The various clinical features are

- Acute watery diarrhoea
- No blood in stool

- No mucous in stool
- No specific faecal odour
- Stool is often gray and turbid (rice water stool)
- Possible vomiting
- Severe dehydration which can have a rapid onset, can be severe, and is potentially fatal
- Possible shock

ii) Diagnosis

Check for sudden onset of diarrhoea with the following:

- Blood in stools
- Mucous in stools
- Fever
- Often abdominal cramps
- Toxic appearance
- Possibly associated convulsions
- Lethargy

iii) Amoebic dysentery is a condition characterised by diarrhoea caused by *Entamoeba histolytica*.

Check Your Progress 3

i) Viral hepatitis is an infection of the liver caused hepatitis A virus (HAV), hepatitis E virus (HEV), hepatitis B virus (HBV), and hepatitis C virus (HCV). Hepatitis A and E are typically caused by ingestion of contaminated food or water. Hepatitis B, C and D usually occur as a result of parenteral contact with infected body fluids. All hepatitis viruses can cause acute hepatitis. Viral hepatitis types B and C can cause chronic hepatitis.

ii) Signs and Symptoms

- Hematemesis &/or malena
- Coffee ground gastric aspirate
- Pain
- Hypovolemic shock
- Tachycardia
- Hypotension