Chapter 11

An Approach to Gastrointestinal Bleeding (Hematochezia 血便)

Clinical Case

A 53-year-old odd-job worker presents with a 1-day history of giddiness, lethargy and black, foul-smelling stools (which he is unable to quantify). He has no past medical history, apart from longstanding back pain, for which he has been taking naproxen. He drinks, on average, eight bottles of beer plus some hard liquor each day.

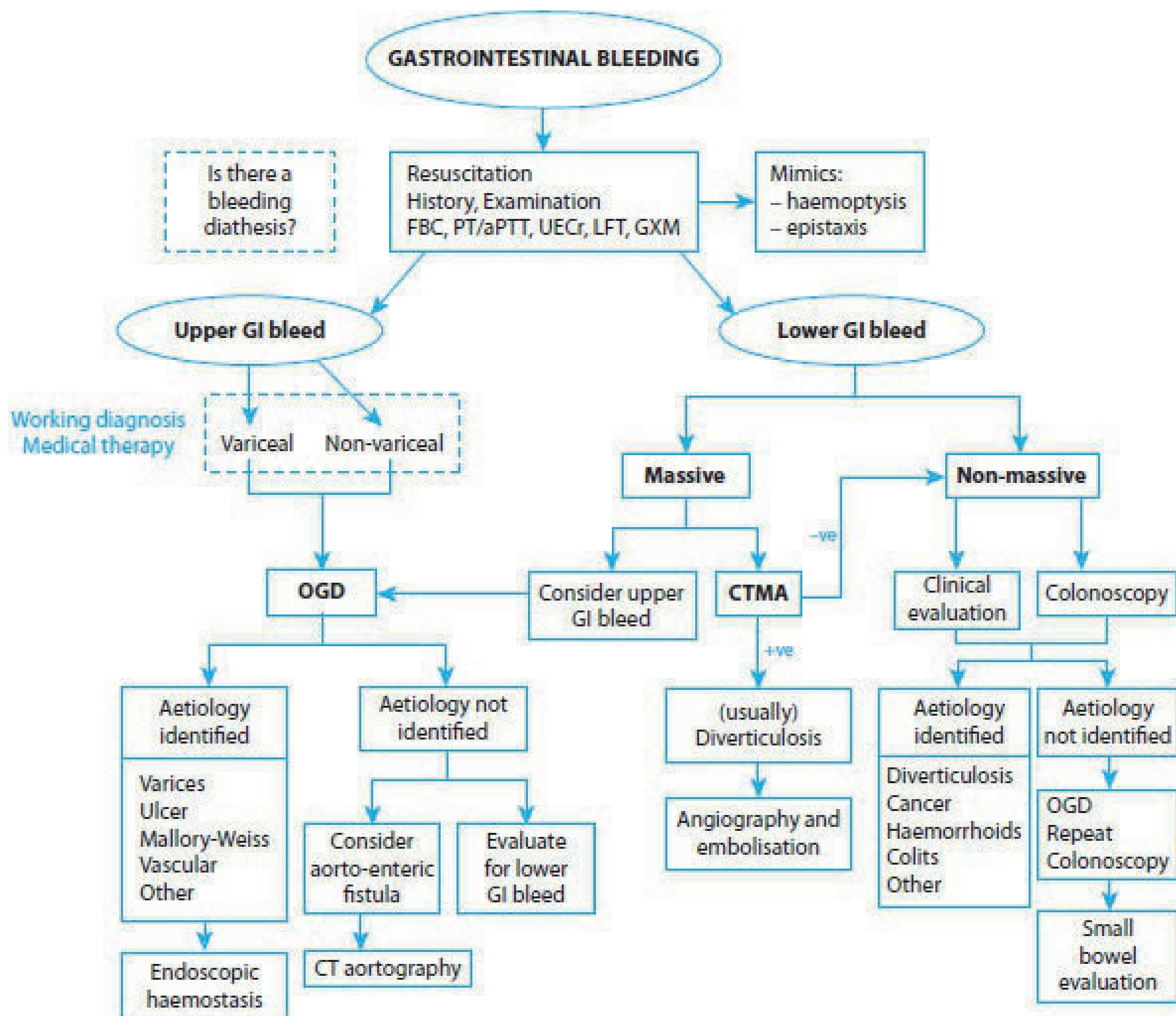
On arrival in the Emergency Department, his vitals are: BP 102/54, HR 132, SpO2 98% on room air, Temp 37.5° C. On examination, he is alert and anxious. Conjunctival pallor, palmar erythema and mild abdominal distension with shifting dullness are noted. His abdomen was soft with no masses. Blood is drawn for full blood count (FBC), coagulation studies, electrolytes, liver function and group and cross-match. How would you approach his presenting complaint?

Acute gastrointestinal bleeding manifests overtly with **haematemesis** (vomiting of fresh blood or coffee-ground material), **melena** (black, sticky, foul-smelling stools) or fresh **per-rectal bleeding** (haematochezia). This can be massive, leading to hypotension and death. Do not be misled by *normal* haemoglobin levels here—haemoglobin takes time to fall.[1] Conversely, gastrointestinal bleeding may be occult, presenting with trace amounts of rectal bleeding and chronic anaemia, which may or may not be symptomatic

(Figure 11.1).

Distinguishing Upper vs. Lower Gastrointestinal Bleeding

Following resuscitation, confirm that bleeding is from the gastrointestinal tract (haemoptysis and epistaxis may mimic gastrointestinal bleeding) and distinguish clinically between an upper and a lower gastrointestinal bleed (Table 11.1). Initial investigations should include a full blood count (FBC), coagulation profile, urea and electrolytes, liver enzymes and group cross-match.



See text for details of clinical evaluation and/or identification of aetiologies.

CTMA, CT mesenteric angiography; FBC, full blood count; GXM, group and cross match; LFT, liver function test; OGD, oesophagogastroduodenoscopy; UECr, urea, electrolytes and creatinine.

Figure 11.1. Approach to gastrointestinal bleeding.

Is There a Bleeding Diathesis?

Features that prompt consideration of a systemic bleeding diathesis include

- Bleeding from multiple sites—for example, mucocutaneous or intracranial bleeding in addition to gastrointestinal bleeding.
- Clinical context predisposing to bleeding—dengue infection, sepsis with disseminated intravascular coagulopathy.
- Laboratory findings—significant coagulopathy, severe thrombocytopenia.

In such situations, further evaluation for a cause of systemic bleeding may be necessary (see Chapter 33). On the other hand, gastrointestinal bleeding should not simply be blamed on a known bleeding diathesis or drugs (e.g., anticoagulation or antiplatelets) without consideration for gastrointestinal workup, as the presence of these contributory factors does not rule out an anatomical abnormality in the gastrointestinal tract that is responsible for bleeding.

Table 11.1. Distinguishing Upper vs. Lower Gastrointestinal Bleeding

	Upper gastrointestinal bleed	Lower gastrointestinal bleed
Anatomic location	Oesophagus, Stomach, Duodenum (proximal to ligament of Treitz at duodenojejunal junction).	Jejunum, Ileum, Colon, Rectum (distal to ligament of Treitz at duodenojejunal junction).
Clinical symptoms	Haematemesis, melena. May also present with per-rectal bleed if rate of bleed is too quick for digestion of blood to occur.	Per-rectal bleed, slow or brisk. Blood clots in stool makes a lower gastrointestinal source more likely.
Laboratory clues	Urea elevated out of proportion to creatinine (due to gastric digestion of blood). Deranged liver enzymes or history of cirrhosis.	—

Notes	Massive bleeding or hypotension should be presumed as upper until proven otherwise.	

Upper Gastrointestinal Bleeding

The approach to upper gastrointestinal bleeding, in most patients, centres around adequate resuscitation followed by early endoscopic haemostasis.

Initial Plan: Variceal vs. Non-Variceal Bleed

The aims of initial management are to (a) maintain haemodynamic stability, (b) risk stratify, (c) optimise the patient for endoscopy (including blood transfusion as necessary) and (d) institute pre-endoscopic medical therapy. As pre-endoscopic management differs between variceal and non-variceal bleeding, it is important to make an early working diagnosis of variceal or non-variceal bleeding.

- **Variceal bleeding**: Oesophageal varices are a consequence of portal hypertension. Suspect variceal bleeding if there is (a) a history of cirrhosis ± known varices, (b) signs of chronic liver disease, for example, jaundice, ascites or splenomegaly, (c) abnormal liver function tests or (d) coagulopathy or thrombocytopenia.
- **Non-variceal bleeding**: In the absence of the factors above, patients can be initially managed as a non-variceal bleed (pre-endoscopic medical therapy differs).

In either case, patients should proceed to oesophagogastroduodenoscopy (OGD), after considering risk and benefit.

OGD: Bleeding Lesion Found

OGD will, in many cases, identify the source of upper gastrointestinal bleed, including

- **Peptic ulcers**: Common and treatable. Hunt down *why* the patient has

peptic ulcer disease—test for *Helicobacter pylori* (e.g., a rapid *CLO* test), look for drugs that cause peptic ulceration (e.g., Non-steroidal anti-inflammatory drugs [NSAIDs], antiplatelets, steroids), and a history of smoking. As gastric cancer can present as an ulcer with irregular margins, gastric ulcers are usually biopsied. A repeat OGD may be performed to document healing of a gastric ulcer (failure to heal prompts suspicion of cancer); biopsy or repeat OGD is not necessary for a duodenal ulcer.

- **Complications of portal hypertension**: Oesophageal varices and portal hypertensive gastropathy (diffuse oozing from friable vessels) occur in cirrhotics with portal hypertension.
- **Oesophagitis**: Oesophageal inflammation can present with bleeding. This may be due to gastroesophageal reflux, drugs (e.g., tetracyclines and bisphosphonates), or infection.
- **Mallory–Weiss tear**: A longitudinal oesophageal mucosal tear, classically after an episode of binge drinking leading to violent vomiting or retching.
- **Vascular lesions**: For example, angiodysplasia, Dieulafoy's lesion, gastric antral vascular ectasia (GAVE).

Note: 'Gastritis' is an endoscopic description of mild mucosal erythema suggesting inflammation. It is common and rarely leads to significant bleeding—gastrointestinal bleeding should usually not be ascribed to gastritis alone, without a search for other sources.

Apart from its diagnostic utility, OGD also allows for therapeutic manoeuvres to secure haemostasis (e.g., banding of varices, clipping of ulcers, etc.).

OGD: Bleeding Lesion Not Found

If the OGD is negative, consider

- **Colonoscopy**: Evaluate for lower gastrointestinal causes of bleeding. Blood from right-sided colonic lesions may appear altered, resembling melena.
- **CT scan for aorto-enteric fistula**: Patients who have received prior aortic surgery and grafting (e.g., for repair of dissection) may develop an aorto-enteric fistula, which is an anomalous connection between aorta and intestine that leads to gastrointestinal bleeding. If there is a history of aortic

disease or surgery, consider CT aortography to look for an aorto-enteric fistula.

Lower Gastrointestinal Bleeding

Begin by triaging the severity of bleeding. Practically, a massive per-rectal bleed is one which causes haemodynamic instability (including tachycardia), an acute and significant fall in haemoglobin (e.g., > 2 g/dL over 24 hr), or is large volume and persistent.

Massive Lower Gastrointestinal Bleed

The usual cause of massive lower gastrointestinal bleeding is diverticular disease, as diverticula can form at the site of penetrating arteries and cause an arterial bleed. The other aetiologies of lower gastrointestinal bleed tend not to be as massive. The approach is to

1. **Exclude upper gastrointestinal bleeding**: Some large upper gastrointestinal bleeds present with per-rectal bleeding instead of melena, if the bleed is too rapid for digestion of blood to occur. Consideration should be given to
    - If clinical suspicion is high (e.g., hypotensive, elevated urea, known liver disease)—OGD after appropriate resuscitation.
    - If clinical suspicion is low (e.g., previous diverticular bleed, not hypotensive)—either OGD or nasogastric lavage (i.e., insert nasogastric tube and connect to wall suction). Coffee-ground aspirates or fresh blood on nasogastric lavage confirms an upper gastrointestinal source of bleed; however, it may be falsely negative if bleeding arises beyond a closed pylorus (e.g., in a duodenal ulcer). Avoid nasogastric tube insertion if varices are suspected as it may traumatise the varices and cause more bleeding.
2. **CT mesenteric angiogram (CTMA)**: This is particularly useful in ongoing massive bleeding, and allows identification of a bleeding source anywhere in the gastrointestinal tract (including small bowel).

- **CTMA positive**: An active brisk bleed (> 0.3 mL/min) is visualised as an arterial blush (i.e., contrast extravasation from vessels). If CTMA is positive, proceed to catheter angiography, which allows embolisation of the bleeding vessel.
- **CTMA negative**: A negative CTMA implies either that bleeding has either stopped, or is too slow (< 0.3 mL/min) to be visualised. Diverticula may bleed intermittently and elude capture by CTMA. If CTMA is negative, proceed to colonoscopy as in non-massive bleed.

Non-Massive Lower Gastrointestinal Bleed

There are numerous causes of non-massive lower gastrointestinal bleeding. Most patients should be evaluated clinically, and receive colonoscopy.

1. **Clinical evaluation**: Useful information can be obtained on clinical history and examination. As a rule of thumb, proximal bleeding (small bowel and right-sided colon) gives altered (darker) blood mixed with faeces; distal bleeding (left-sided colon and anorectal, e.g., haemorrhoids) gives fresh (red) blood coating faeces, toilet paper or dripping into the toilet bowl after defecation. This is a helpful clinical distinction but, unfortunately, not completely reliable. Three questions are helpful

   (a) Apart from rectal bleeding, are there any other symptoms or concerning history?

   (b) What does rectal exam and proctoscopy find?

   (c) If isolated painless per-rectal bleeding, with normal rectal exam, what can it be?

   (a) **Are there any other symptoms or concerning history?**

   - **Suspicion of cancer**: Loss of appetite and weight, change in bowel habits (alternating constipation and diarrhoea, decrease in stool calibre), palpable abdominal mass or positive family history of colorectal cancer raises suspicion of cancer. Tenesmus, a persistent, uncomfortable desire to defecate, is worrisome for rectal cancer.
   - **Colitis**: Bloody diarrhoea with abdominal colic, tenderness to palpation ± fever, malaise and systemic toxicity. Colitis may be due

to

  – Inflammatory bowel disease (Crohn's disease and ulcerative colitis): usually in a young patient, who may also have extra-intestinal manifestations (arthritis, uveitis, erythema nodosum, etc.).
  – Ischaemic colitis: Can arise from atherosclerotic disease or vasculitis. There may be post-meal abdominal colic.
  – Infective colitis: Acute bloody diarrhoea, possibly with a history of travel, or consumption of spoilt food. The amount of blood in stool is usually mild to moderate, and mixed with stools.

- Previous pelvic radiation: In patients with previous pelvic radiation (e.g., for rectal or prostate cancer), consider radiation colitis vs. cancer recurrence.
- Recent endoscopic therapy: Bleeding may occur following endoscopic biopsy or polypectomy, and is self-limited in most cases.

(b) **What does rectal exam and proctoscopy find?**

- **Haemorrhoids**: Dilated submucosal veins (visible on proctoscopy in the 3, 7 and 10 o'clock positions), often with contact bleeding or blood stains. Haemorrhoidal bleeding is usually bright red, of small amount, and may coat faeces or toilet paper. Some haemorrhoids may also prolapse (protrude from the anus during defecation).
- **Other anorectal abnormalities**: For example, anorectal tumour (palpable mass on rectal exam), rectal ulcers and so forth.

(c) **Isolated painless per-rectal bleeding, with normal rectal exam**—conditions in this category include

- **Diverticular bleed**: Diverticuli are outpouchings of the colonic mucosa through weaknesses of the colon wall. Diverticular bleeds are common, can be of rather large amount (can also be small amount), and blood may be red or dark.
- **Angiodysplasia**: Dilated, tortuous submucosal vessels.
- **Colon polyp or tumour** may be asymptomatic.

2. **Colonoscopy**: Most patients (unless medically unfit) should receive colonoscopy after appropriate resuscitation, transfusion and bowel

preparation. This is because even if a source of bleeding (e.g., haemorrhoids) can be found on clinical examination, it does not exclude a second source of bleeding, which may be sinister (e.g., colon cancer). Colonoscopy is useful to identify anatomic lesions causing bleeding (e.g., tumour, diverticula, ulcerative colitis), and allows for endoscopic therapeutics.

Initial Evaluation Negative

In a minority of patients, clinical evaluation and colonoscopy fail to reveal a source of per-rectal bleeding. In these patients, consider

- **OGD**: For an upper gastrointestinal source, if not already done.
- **Repeat colonoscopy**: Especially if the first colonoscopy was suboptimal (e.g., poor bowel preparation) and lesions could have been missed.
- **Small bowel evaluation**: Small bowel sources of bleeding include a Meckel's diverticulum, vascular lesions (e.g., Dieulafoy's lesion), small bowel tumour and so forth. There are a variety of methods to evaluate the small bowel. Patients with brisk bleeding should undergo CTMA. Patients with slow bleeding or chronic iron-deficiency anaemia should be considered for capsule endoscopy or push enteroscopy.

Using what you have learnt, **pen down your approach** to the Clinical Case at the start of the chapter **BEFORE reading the discussion** below.

Case Discussion

This is a middle-aged gentleman with upper gastrointestinal bleeding. He is tachycardic, pale and giddy—suggesting that he has bled sufficiently to cause hypovolaemia and anaemia. He has signs of chronic liver disease (ascites and palmar erythema) and risk factors (heavy drinking), and should be managed as a presumptive variceal bleed. Following resuscitation and blood transfusion, he will require early endoscopy, which may reveal oesophageal varices. Alternatively, it may also find peptic ulceration—he also has risk factors of non-steroidal

anti-inflammatory drug (NSAIDs) and alcohol.

Key Lessons	1. Upper gastrointestinal bleeding may be variceal or non-variceal (peptic ulcers, Mallory–Weiss tear, vascular lesions, etc.). Early oesophagogastroduodenoscopy is diagnostic and therapeutic. 2. In massive per-rectal bleeding, exclude an upper gastrointestinal source, and consider CT mesenteric angiogram (CTMA). 3. Non-massive per-rectal bleeding is most commonly due to diverticulosis, haemorrhoids and cancer. Following clinical evaluation (including rectal examination and proctoscopy), most patients should receive colonoscopy.
Common Pitfalls	1. Haemoglobin may be normal in acute gastrointestinal bleeding. 2. The presence of obvious haemorrhoids does not exclude a second cause of gastrointestinal bleeding. 3. Diverticular bleeding is relatively *painless*, at most, there may be an uncomfortable urge to defecate (as blood is a cathartic). Significant abdominal pain, tenderness or systemic toxicity is inconsistent with diverticular bleeding—suspect colitis.
Questions	1. **REFLECT!** Have you ever had a patient with haemodynamic instability from gastrointestinal bleeding? What were the differential diagnoses, and what was done for the patient? 2. **EXPLORE!** Consent-taking for OGD and colonoscopy is commonly performed by junior physicians. How would you counsel a patient on the procedure, as well as its risks and alternatives? 3. **DISCUSS!** It is not uncommon for patients with poor premorbids to present with gastrointestinal bleeding. Suppose an 80-year-old lady who is bedbound after a cerebrovascular accident presents with per-rectal bleeding and a haemoglobin of 5 g/dL. Should endoscopy be performed? What are the considerations here?

[1] Acutely, both red cells and plasma are proportionately lost, so haemoglobin remains normal. Only after fluid resuscitation (by physicians or by the body's own fluid conservation mechanisms), when a fixed amount of red cells is diluted in an increased plasma volume, does the haemoglobin fall.

Chapter 12

An Approach to Nausea and Vomiting

Clinical Case

A 29-year-old school teacher complains of a 2-day history of progressively severe vomiting. The contents of his vomitus were initially partially digested food, then yellow-green fluid. He has also been having intermittent abdominal pain. His last bowel output was yesterday, and it was of normal consistency. He has no headache or giddiness. He has no past medical history. On examination, his vitals are: T 37.6, BP 121/59, HR 95. He is alert and orientated. His abdomen is distended with sluggish bowel sounds. How would you approach his complaint?

Vomiting is a forceful expulsion of gastric contents (unlike regurgitation which involves minimal effort). Nausea is a sensation of a desire to vomit. Vomiting is a complex reflex involving both the gastrointestinal tract and central nervous system; it is therefore unsurprising that the causes of vomiting are not merely limited to the gut.

GENERAL FRAMEWORK

"WIPE" – Introduce yourself, whilst gaining consent
- Wash hands
- Introduce self – "Hello, my name is X and I am a medical student"
- Patient details – "Could I ask your full name and age?"
- Explain – I have been asked to speak with you about what brings you in, would that be alright?

Open

- Open – I understand you've recently noticed some blood in stool, which must have been very distressing. Can you tell me about that?
- Clarify – Can I just clarify where you noticed the blood? Was it on the paper/ pan or was mixed in with the stool? Definitely from your back passage or could be menstruation/ in urine?

Timeline
1. When did you first notice the bleeding? Did anything happen around then?
2. Did it come on suddenly or gradually?
3. Does the bleeding come and go or is it always there?
4. Has it been getting worse?
5. Have you had bleeding like this before?

Symptoms
- Blood **Colour** – Is the blood bright red or dark and "tar-like"?

Amount – How much blood would you say there is? Splatters; spoonfuls; cupfuls?
- Stool – **"AAFI"**

Amount -How much?
Appearance – Consistency? Colour? Content – Blood? Mucus?
Frequency -How often?
Incomplete emptying – Do you often feel like you need to go again after having just been to the toilet?
- Others –
Pain – Do you have any pain on passing stool?
Itchiness – Do you have any itchiness in your back passage?
Lumps – Have you noticed any lumps in your back passage?

Systems
- Gastrointestinal – How has your appetite been? Have you had any problems swallowing? Have you been sick at all? ±Blood? Have you had any tummy pain? **How have your bowel movements been, other than the blood?**
- Constitutional – How has your appetite been? Have you noticed a change in weight? Have you been feeling tired recently? Have you had a fever? Night-sweats?
- +Food, drink & Exercise – How is your diet? Do you exercise regularly?
- + Travel – Have you travelled anywhere recently? Ate anything more exotic?

ICE

- You've given me a lot of information, thank you. I'd like to hear a little about what you think could be going on. Do you have any idea?
- Is there anything that's particularly concerning you that you'd like to discuss?
- What exactly are you looking for today, resolution or reassurance?

PMHx
- Do you have any medical conditions?
- Ask a few specific questions to show that you're thinking about different causes
- Specifically, I'd like to ask if you've ever been diagnosed with:
"AABBCP"

Anal fissures? Anal prolapse? Bleeding disorders? Bowel problems (Inflammatory bowel
DHx
- On any medication? Any doses of medication changed? Specifically ask: Any laxatives? Blood thinning medication?
- Any allergies?
FHx
- Any conditions run in the family? Specifically, I'd like to ask about bowel problems? Colorectal cancer? Bleeding disorders?
- Has anyone in the family passed blood in their stool like this before?

SHx
- Smoking/ Alcohol/ Recreational drugs
- Home environment? Support?
- Occupation – impact on life and on occupation?

Summarise and Thank
- I'd just like to summarise back to you to make sure I haven't missed anything
- Is there anything you'd like to talk about that we haven't quite addressed?
- Thank you for talking to me and I wish you all the best

Investigations
Examination Abdominal examination (?CLD signs), digital rectal examination
Bedside Urinalysis, temperature
Bloods FBC, clotting, U&E, CEA, LFTs, amylase, lactate, CRP
Imaging AXR, CT abdomen
Special Proctoscopy, colonoscopy, stool MC&S incl. OC&P, faecal calprotectin

***Top Tip!* When should you refer someone with PR Bleeding?**
This depends on if they have high risk features e.g. anorexia, change in bowel habit, lethargy Any Age + high risk features Refer to colorectal clinic
Above 40 + No high risk features Flexible Sigmoidoscopy
Below 40 + No high risk features Conservative Management

Differential Diagnosis
Diagnosis Features In History
Cancer

PR blood (ranging from fresh melena) associated with change in bowel habit, weight loss (quantify!), lethargy, anorexia. RF: FH, previous polyps, smoking

Features In Investigations DRE: may feel rectal mass.

Bloods: Iron deficiency anaemia, raised CEA, WCC/CRP. Obstruction on AXR.
CT CAP for staging CT. Colonoscopy for

diagnosis (biopsy)

Management

Surgical resection usually; may get adjunct radio-/ chemo-therapy. Regular screening colonoscopies.

Haemorrhoids
Anal Fissure

Upper GI bleed (above ligament of Treitz)

Inflammatory Bowel Disease (UC > Crohn's)

Painless fresh red blood usually on top of stool and on toilet paper. May feel lump (does it go back inside? Can you push it back?). Are they tender (thrombosed)? RF: History of constipation
DRE: external
haemorrhoids visible, or internal haemorrhoids palpable.

Fresh red blood on toilet paper, fleeting, severe, sharp pain on defecation. Very tender. May be
associated with constipation (hard stool as cause of
fissure and due to trying to avoid pain from fissure). Melena (black, sticky, foul smelling stool), associated with epigastric discomfort, may have haematemesis. Ass. with history of
oesophageal varices and peptic ulcer disease.

Frequent, intermittent, chronic, bloody/mucous loose stools, weight loss, anorexia, lethargy. Extra intestinal: eyes, joint pains, skin rashes, perianal abscess.
DRE: may see fissure, internal examination in very uncomfortable for patient. No masses. Depends on grade and symptoms. Thrombosed
haemorrhoids need surgical
intervention if
within 48 hours. Advice to keep stools soft (diet, hydration), simple analgesia, topical steroids.

Advice to keep stools soft (diet, hydration), simple analgesia, warm baths, GTN
ointment if no
improvement.

Exam: signs of chronic liver disease. DRE: no masses or fresh blood, melena.
Bloods: low Hb, high urea (protein meal),
deranged LFTs.
Generalised abdominal tenderness, may have RIF mass (ileocecal)
Raised WCC, CRP.
Faecal calprotectin
raised. AXR may show thumb printing.
Colonoscopy for biopsy (?transmural
inflammation)
Urgent assessment of haemodynamic stability, admit OGD. Calculate Blatchford and Rockall scores.

Rehydrate,
Immunosuppression (prednisolone,
(prednisolone,
MP, infliximab etc. depending on
response) to induce remission in acute flare.

Also consider: diverticulitis and haemorrhagic gastroenteritis (Shigella, Campylobacter, Salmonella, Yersinia, E.coli) if infective symptoms present. Rarely, clotting disorders may present with PR bleed.

Marking Criteria Rectal Bleed Marks Awarded Available Washes hands at the start of the station 1 **I**ntroduces themselves – Including First name, last name and role 1 **P**atient details confirmed: Full name, Age/ D.O.B. 1 **E**xplains purpose of consultation 1 **Open** question about what brings the patient in today + Clarification of any ambiguity –1Blood on paper? Pan? Mixed with stool?

Timeline allows a clear understanding of onset and progression
- Onset/ Circumstance
- Sudden vs. gradual3- Fluctuations

- Progression
- Past episodes

Symptoms elicited are relevant and clearly directed at either arriving at a diagnosis or

excluding other plausible diagnoses
- Blood
o Colour
o Amount

- Stool

o Amount 5o Appearance
o Frequency
o Incomplete emptying

- Others
o Pain
o Itchiness

o Lumps

Systems queried are relevant to the complaint and adequate questions are asked for each
symptom 5

- Gastrointestinal; Constitutional; **Food/ drink/ exercise**; **Travel**

Explores **Ideas, Concerns and Expectations** 3

Elicits relevant **Past Medical History** 2- Bowel conditions; Irritable bowels; Cancer
Elicits relevant **Drug History** including **Allergies** 2
Elicits relevant **Family History** 2
Elicits relevant **Social History** – including **S**moking/ alcohol/ recreational drugs; **H**ome2environment and support; **O**ccupation and impact on life

Closes consultation appropriately allowing the patient to ask any questions 1
Presentation: structured, concise 2
Appropriate Differential Diagnosis ± Investigations ± Management Plan 3
Examiner mark – professionalism and rapport 5

Patient mark – professionalism and rapport 5

Consultation Presentation Global marks patient Global marks examiner Total 85F with 5 weeks of PR bleed.
Patient complaining of 5 weeks of PR bleeding. Says blood is mixed in with stool. She also describes that she is passing stool more often and that it is looser. She has been losing weight for

HPC recently and has dropped 3 dress sizes. Not actively trying to lose weight. Also describes nausea and vomiting as well as increased fatigue. Sleeps more than usually but has to wake up at night as feels hot and sweaty. No fever, SOB, cough, CP, no infective symptoms.

PMHx HTN, Crohn's
DHx Aspirin, bisoprolol, azathioprine, NKDA
FHx Mother also had Crohn's, nil other.
SHx Ex-Smoker, quit 20 years ago due to Crohn's, drinks 2 units of alcohol per day, Lives alone, widow **ICE** "Doctor, I'm worried. I'm not young anymore - Do you reckon it is something bad?" **Ix** FBC, iron studies, CRP, LFT, U&E, faecal calprotectin, PR, Colonoscopy, CT abdomen **Dx** Bowel Cancer

Tx
Refer to Specialist MDT for consideration of surgery chemo/radiotherapy. Involve palliative team and McMillan nurses if appropriate

50M with 4 day history of PR bleeding
4 day history of PR bleeding. Fresh blood when wiping. On paper after opening bowels. Not mixed in with stool, on top of stool and in bowl. Thinks it is large amounts as the water is very red. Usually constipated which is worse in the last week. Increased strain to pass faeces. Painful and

HPC itchy rectum. Especially when sitting for long time. Painful when opening bowels. Says he avoids vegetables as he doesn't like the taste and they make him feel bloated. Diet mainly consists of processed food as he travels a lot. Reports no abdominal pain. No systemic symptoms of infection. No nausea, no vomiting, no CP, no SOB

PMHx HTN, T2DM.
DHx Metformin, Ramipril, NKDA
SHx Pub owner, Married. Drinks up to 10 units per day, sometimes more. Non-smoker. Obese. **FHx** Father diagnosed with bowel cancer age 50.
ICE "I'm worried that I have cancer- my dad had blood in his faeces before he was diagnosed as well." **Ix** FBC, U&E, LFT, Vitamin B and folate, iron studies, consider colonoscopy or CT abdo-pelvis. **Dx** Haemorrhoids

Tx
Conservative management with increased fibre and water intake, topical treatment. Surgery if very troublesome or prolapsing.

17F with PR bleeding and diarrhoea
Reports 3-months history of diarrhoea and some abdominal pain. Recently blood in stool. Blood mixed with stool. Progressively worsening symptoms. Had episodes of long term diarrhoea in the

HPC

past, but usually self-resolve. Reports low grade fever and weight loss (unable to quantify) and generally finds it difficult to gain weight. Complaining of sore knees, hips and elbows. Symptoms are particularly worse around her exam times. No lumps and bumps. No night sweats. Reports no SOB, CP or dizziness. No vomiting. No nausea. No Dysuria. Period regular.

PMHx Menarche age 14, nil otherwise
DHx Paracetamol for pain PRN, oral contraceptive pill, NKDA
SHx Non-smoker, does not drink, single, no IVDU or other drug use
FHx Nil relevant

"Doctor, I'm so embarrassed by this. I'm constantly running to the toilet because I have diarrhoea

ICE and now there's also blood in here and it worries me. I'm tired all the time and getting afraid of leaving the house because I don't want to use my friend's toilets."
Ix FBC, Vitamin B, folate, faecal calprotectin, LFTs, Endoscopy,

Sigmoidoscopy/colonoscopy, AXR
Dx Ulcerative colitis
Symptom control, anti-inflammatory (5ASAs), steroids, immunosuppression (Azathioprine,
Tx ciclosporin, Methotrexate) and biological agents like Infliximab/Adalimumab. Advise smoking cessation. Surgery is if toxic megacolon or refractory to treatment.

GENITOURINARY HISTORIES
DYSURIA

"WOCC SOCRATES"

" **W**IPE" – Introduce yourself, whilst gaining consent
- Wash hands
- Introduce self – "Hello, my name is X and I am a medical student"
- Patient details – "Could I ask your full name and age?"
- Explain –"I have been asked to speak with you about what brings you in, would that be alright?"

O pen
- I understand you've had some pain on passing urine, would you mind telling me more about that?
- **C**larification – Is the pain only when you pass urine or other times also?
- **C**onsider pain relief – You seem to be in a lot of pain. Have you been offered pain relief?

Site
- Where exactly do you feel this pain?

O nset
1. When did the pain start? Did anything happen around then?
2. Did the pain come on suddenly or gradually?
3. Does the pain come and go or is it there every time you urinate?
4. Has the pain been getting worse?
5. Have you ever had pain like this before?