Gastrointestinal Tract Problems

Irritable bowel syndrome

Haemorrhoids

Irritable bowel syndrome

- a chronic, functional bowel disorder in which abdominal pain is associated with intermittent diarrhoea, sometimes alternating with constipation, and a feeling of abdominal distension.

- IBS is estimated to affect 20% of adults in the industrialised world, most of whom (up to three quarters) do not consult a doctor.

- the incidence of the condition appears to be higher in women.
- The cause is unknown.
- IBS can sometimes develop after a bout of gastroenteritis.
- It often seems to be triggered by stress, and many IBS sufferers have symptoms of anxiety and depression.
- Some sufferers have food intolerances which trigger their symptoms.

Age

- Because of the difficulties in diagnosis of abdominal pain in children, it is best to refer.
- IBS usually develops in young adult life.
- If an older adult is presenting for the first time with no previous history of bowel problems, a referral should be made.

Symptoms

- IBS has three key symptoms:
  - abdominal pain (which may ease following a bowel movement),
  - abdominal distension/bloating and
  - disturbance of bowel habit.

Abdominal pain

- The pain can occur anywhere in the abdomen.
- It is often central or left sided and can be severe.
- When pain occurs in the upper abdomen, it can be confused with peptic ulcer or gall bladder pain.
- The site of pain can vary from person to person and even for an individual.
- Sometimes the pain comes on after eating and can be relieved by defaecation.

Bloating

- A sensation of bloating is commonly reported. Sometimes it is so severe that clothes have to be loosened.

Bowel habit

- Diarrhoea and constipation may occur; sometimes they alternate.
- A morning rush is common, where the patient feels an urgent desire to defaecate several times after getting up in the morning and following breakfast, after which the bowels may settle.
- There may be a feeling of incomplete emptying after a bowel movement. The motion is often described as loose and semi-formed rather than watery.
- Sometimes it is like pellets or rabbit droppings, or pencil shaped. There may be mucus present but never blood.

Other symptoms

- Nausea sometimes occurs; vomiting is less common.
- Patients may also complain of apparently unrelated symptoms such as backache, feeling lethargic and tired.
- Urinary symptoms may be associated with IBS, for example, frequency, urgency and nocturia (the need to pass urine during the night).
- Some women report dyspareunia.

Duration

- Patients may present when the first symptoms occur or
- may describe a pattern of symptoms, which has been going on for months or even years.
- If an older person is presenting for the first time, referral is most appropriate.

Previous history

- You need to know whether the patient has consulted his/her doctor about the symptoms and, if so, what they were told.
- A history of travel abroad and gastroenteritis sometimes appears to trigger an irritable bowel.
- Referral is necessary to exclude an unresolved infection.
- Any history of previous bowel surgery would suggest a need for referral.

Aggravating factors

- Stress appears to play an important role and can precipitate and exacerbate symptoms.
- Caffeine often worsens symptoms and its stimulant effect on the bowel and irritant effect on the stomach are well known in any case.
- The sweeteners sorbitol and fructose have also been reported to aggravate IBS.
- Other foods that have been implicated are milk and dairy products, chocolate, onions, garlic, chives and leeks.

Medication

- You need to know what has been tried and whether it produced any improvement.
- It is also important to know what other medicines the patient is taking.
- In many patients, IBS is associated with anxiety and depression, but it is not known whether this is cause or effect.

When to refer

Children

Older person with no previous history of IBS

Pregnant women

Blood in stools

Unexplained weight loss

Caution in patients aged over 45 years with changed bowel habit

Signs of bowel obstruction

Unresponsive to appropriate treatment

Symptoms should start to improve within 1 week.

Management
Antispasmodics

- Antispasmodics are the mainstay of OTC treatment of IBS, and research trials show some improvement in abdominal pain with smooth muscle relaxants.

- *Alverine citrate*, *peppermint*, *mebeverine* and *hyoscine* are used.

- They work by a direct effect on the smooth muscle of the gut, causing relaxation and thus reducing abdominal pain.

- The patient should see an improvement within a few days of starting treatment and should be asked to return to you in 1 week, so you can monitor progress.

- It is worth trying a different antispasmodic if the first has not worked. Side effects from antispasmodics are rare.

- All antispasmodics are contraindicated in paralytic ileus, a serious condition that fortunately occurs only rarely (e.g. after abdominal operations and in peritonitis).

- Here the gut is not functioning and is obstructed.

- The symptoms would be severe pain, no bowel movements and possibly vomiting of partly digested food.

- Immediate referral is needed.

Alverine citrate

- *Alverine citrate* is given in a dose of 60–120 mg (one or two capsules) up to three times a day.
- Remind the patient to take the capsules with water and not to chew them.
- The drug should not be recommended for pregnant or breastfeeding women or for children.
- *Alverine citrate* is also available in a combination product with *sterculia* (‘Bulking agents’).

Peppermint oil

- *Peppermint oil* has been used for many years as an aid to digestion and has an antispasmodic effect.
- Capsules containing 0.2 mL of the oil are taken in a dose of one or two capsules three times a day, 15–30 min before meals.
- They are enteric coated, with the intention that the *peppermint oil* is delivered beyond the stomach and upper small bowel.
- Patients should be reminded not to chew the capsules as not only will this render the treatment ineffective, it will also cause irritation of the mouth and oesophagus.

- This treatment should not be recommended for children.
- Occasionally, *peppermint oil* causes heartburn and so is best avoided in patients who already suffer from this problem.
- Allergic reactions can occur and are rare; rash, headache and muscle tremor have been reported in such cases.

Mebeverine hydrochloride

- *Mebeverine hydrochloride* is used at a dose of 135 mg three times a day.

- The dose should be taken 20 min before meals.

- The drug should not be recommended for
  - pregnant or breastfeeding women,
  - for children under 10 or for
  - patients with porphyria.

Hyoscine

- *Hyoscine butylbromide* 10 mg tablets can be used in adults and children aged over 6.

- On starting treatment, adults should take one tablet three times a day, increasing if necessary to two tablets four times a day.

Bulking agents

- Traditionally, patients with IBS were told to eat a diet high in fibre, and raw wheat bran was often recommended as a way of increasing the fibre intake.
- Bran is no longer recommended in IBS .
- Bulking agents such as ispaghula containing soluble fibre can help some patients.
- It may take a few weeks of experimentation to find the dose that suits the individual patient.

- Remind the patient to increase fluid intake to take account of the additional fibre.
- Bulking agents are also available in combination with antispasmodics.
- The evidence for benefit is not strong, as studies have involved small numbers of patients.
- Possible positive benefit has been shown for ispaghula husk.

Antidiarrhoeals

- Use of OTC antidiarrhoeals such as *loperamide* is appropriate only on an occasional, short-term basis.

- In two studies involving a total of 100 patients, *loperamide* improved diarrhoea, including frequency of bowel movements, but not abdominal pain or distension.

Diet

- Patients with IBS should follow the recommendations for a healthy (low-fat, low-sugar, high-fibre) diet.
- Foods that contain soluble fibre include:
  - barley
  - rye
  - fruit, such as bananas and apples
  - root vegetables, such as carrots and potatoes
  - golden linseeds

- Foods that contain insoluble fibre include:
  - wholegrain bread
  - bran
  - cereals
  - nuts and seeds (except golden linseeds)

- Patients who have IBS with diarrhoea may find it helpful to eat less insoluble fibre and to avoid the skin, pith and pips from fruit and vegetables.

- Patients who have IBS with constipation can try increasing the amount of soluble fibre and the amount of water drunk.

- Bran (which contains insoluble fibre) used to be widely recommended but it tends to ferment in the bowel and can lead to feelings of bloating and discomfort, and can make symptoms worse.

- Some patients find that excluding foods which they know exacerbate their symptoms is helpful.

- The sweeteners sorbitol and fructose can make symptoms worse and they are found in many foods the patient needs to check labels at the supermarket.

- Cutting out caffeine, milk and dairy products and chocolate may be worth trying.

- **Haemorrhoids**

Haemorrhoids

- Haemorrhoids (commonly known as piles) can produce symptoms of
  - itching, burning, pain, swelling and discomfort in the perianal area and anal canal
  - rectal bleeding.

- Haemorrhoids are swollen veins, rather like varicose veins, which protrude into the anal canal (internal piles).

- They may swell so much that they hang down outside the anus (external piles).

- Haemorrhoids are often caused or exacerbated by inadequate dietary fibre or fluid intake.

- The pharmacist must, by careful questioning, differentiate between this minor condition and others that may be potentially more serious.

What you need to know

- Duration and previous history
- Symptoms
  - Itching, burning
  - Soreness
  - Swelling
  - Pain
  - Blood in stools
  - Constipation
  - Bowel habit
  - Pregnancy
- Other symptoms
  - Abdominal pain/vomiting
  - Weight loss
  - Medication

Duration and previous history

- As an arbitrary guide, the pharmacist might consider treating haemorrhoids of up to 3 weeks' duration.

- It would be useful to establish whether the patient has a previous history of haemorrhoids and if the doctor has been seen about the problem.

- A recent examination by the doctor that has excluded serious symptoms would indicate that treatment of symptoms by the pharmacist would be appropriate.

Symptoms

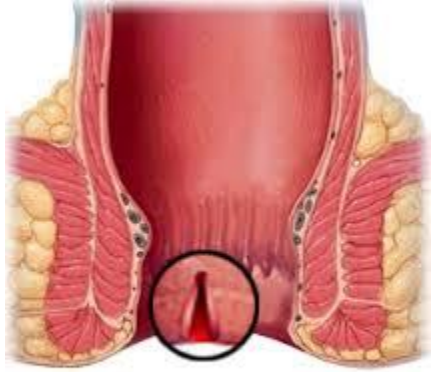
- The term haemorrhoids includes internal and external piles, which can be further classified as
- (1) those which are confined to the anal canal and cannot be seen, first degree

- (2) those which prolapse through the anal sphincter on defaecation and then reduce by themselves or are pushed back through the sphincter after defaecation by the patient. Second degree

- (3) those which remain persistently prolapsed and outside the anal canal. third degree

- Predisposing factors for haemorrhoids include
  - diet,
  - sedentary occupation
  - pregnancy
  - there is thought to be a genetic element.

Pain



Anal Fissure

- Pain is not always present; if it is, it may take the form of a dull ache and may be worse when the patient is having a bowel movement.

- A severe, sharp pain on defaecation may indicate the presence of an anal fissure, which can have an associated sentinel pile (a small skin tag at the posterior margin of the anus) and requires referral.

- A fissure is a minute tear in the skin of the anal canal.
- It is usually caused by constipation and can often be managed conservatively by correcting this and using a local anaesthetic-containing cream or gel.
- In severe cases a minor operation is sometimes necessary.

Irritation

- The most troublesome symptom for many patients is itching and irritation of the perianal area rather than pain.

- Persistent or recurrent irritation, which does not improve, is sometimes associated with rectal cancer and should be referred.

Bleeding

- Blood may be deposited onto the stool from internal haemorrhoids as the stool passes through the anal canal.
- This fresh blood will appear bright red.
- It is typically described as being splashed around the toilet pan and may be seen on the surface of the stool or on the toilet paper.
- If blood is mixed with the stool, it must have come from higher up the GI tract and will be dark in colour (altered blood).

- If rectal bleeding is present, the pharmacist would be well advised to suggest that the patient see the doctor so that an examination can be performed to exclude more serious pathology such as tumour or polyps.

- Colorectal cancer can cause rectal bleeding.

- The disease is unusual in patients under 50 and the pharmacist should be alert for the middle-agedpatient with rectal bleeding.

- This is particularly so if there has been a significant and sustained alteration in bowel habit.

Constipation

- Constipation is a common causatory or exacerbatory factor in haemorrhoids.
- Insufficient dietary fibre and inadequate fluid intake may be involved, and the pharmacist should also consider the possibility of drug-induced constipation.
- Straining at stool will occur if the patient is constipated; this increases the pressure in the haemorrhoidal blood vessels in the anal canal and haemorrhoids may result.
- If piles are painful, the patient may try to avoid defaecation and ignoring the call to open the bowels will make the constipation worse.

Bowel habit

- A persisting change in bowel habit is an indication for referral, as it may be caused by a bowel cancer.

- Seepage of faecal material through the anal sphincter (one form of faecal incontinence) can produce irritation and itching of the perianal area and may be caused by the presence of a tumour.

Pregnancy

- Pregnant women have a higher incidence of haemorrhoids than nonpregnant women.
- This is thought to be due to pressure on the haemorrhoidal vessels due to the gravid uterus.
- Constipation in pregnancy is also a common problem because raised progesterone levels mean that the gut muscles tend to be more relaxed.
- Such constipation can exacerbate symptoms of haemorrhoids. Appropriate dietary advice can be offered by the pharmacist

Other symptoms

- Symptoms of haemorrhoids remain local to the anus.
- They do not cause abdominal pain, distension or vomiting.
- Any of these more widespread symptoms suggest other problems and require referral.
- Tenesmus (the desire to defaecate when there is no stool present in the rectum) sometimes occurs when there is a tumour in the rectum.
- The patient may describe a feeling of often wanting to pass a motion but no faeces being present. This symptom requires urgent referral.

Medication

- Patients may already have tried one or more proprietary preparations to treat their symptoms.
- Some of these products are advertised widely, since the problem of haemorrhoids is perceived as potentially embarrassing and such advertisements may sometimes discourage patients from describing their symptoms.
- It is therefore important for the pharmacist to identify the exact nature of the symptoms being experienced and details of any products used already.
- If the patient is constipated, the use of any laxatives should be established.

Present medication

- Haemorrhoids may be exacerbated by drug-induced constipation and the patient should be carefully questioned about current medication.

- Rectal bleeding in a patient taking *warfarin or another anticoagulant is an indication for referral.*

Table 3 Drugs that may cause constipation.

Drug group	Drug
Analgesics and opiates	*Dihydrocodeine, codeine*
Antacids	*Aluminium salts*
Anticholinergics	*Hyoscine*
Anticonvulsants	*Phenytoin*
Antidepressants	*Tricyclics, selective serotonin reuptake inhibitors*
Antihistamines	*Chlorpheniramine, promethazine*
Antihypertensives	*Clonidine, methyldopa*
Anti-Parkinson agents	*Levodopa*
Beta-blockers	*Propranolol*
Diuretics	*Bendroflumethiazide*
Iron	
Laxative abuse	
Monoamine oxidase inhibitors	
Antipsychotics	*Chlorpromazine*

When to refer

Duration of longer than 3 weeks

Presence of blood in the stools

Change in bowel habit (persisting alteration from normal bowel habit)

Suspected drug-induced constipation

Associated abdominal pain/vomiting

If symptoms have not improved after 1 week, patients should see their doctor.

Management

- Symptomatic treatment of haemorrhoids can provide relief from discomfort but, if present, the underlying cause of constipation must also be addressed.

- The pharmacist is in a good position to offer dietary advice, in addition to treatment, to prevent the recurrence of symptoms in the future.

Local anaesthetics (e.g. benzocaine and lidocaine (lignocaine))

- Local anaesthetics can help to reduce the pain and itching associated with haemorrhoids.

- There is a possibility that local anaesthetics may cause sensitisation and their use is best limited to a maximum of 2 weeks.

Skin protectors

- Many antihaemorrhoidal products are bland, soothing preparations containing skin protectors (e.g. *zinc oxide and kaolin).*
- *These products* have emollient and protective properties.
- Protection of the perianal skin is important, because the presence of faecal matter can cause symptoms such as irritation and itching.
- Protecting agents form a barrier on the skin surface, helping to prevent irritation and loss of moisture from the skin.

Topical steroids

- Ointment and suppositories containing *hydrocortisone with skin protectors* are available.
- The steroid reduces inflammation and swelling to give relief from itching and pain.
- The treatment should be used each morning and at night and after a bowel movement.
- The use of such products is restricted to those over 18.
- Treatment should not be used continuously for longer than 7 days.

Astringents

- Astringents such as
  - zinc oxide,
  - hamamelis (witch hazel) and
  - *bismuth salts*
- *are included in products on the theoretical basis that they will* cause precipitation of proteins when applied to mucous membranes or skin which is broken or damaged.

- A protective layer is then thought to be formed, helping to relieve irritation and inflammation.

- Some astringents also have a protective and mild antiseptic action (e.g. *bismuth).*

Antiseptics

- These are among the ingredients of many antihaemorrhoidal products, including medicated toilet tissues.
- They do not have a specific action in the treatment of haemorrhoids.
- *Resorcinol has antiseptic, antipruritic* and exfoliative properties.
- The exfoliative action is thought to be useful by removing the top layer of skin cells and aiding penetration of medicaments into the skin.
- *Resorcinol can be absorbed systemically* via broken skin if there is prolonged use and its antithyroid action can lead to the development of myxoedema (hypothyroidism).

Counterirritants

- Counterirritants such as *menthol are sometimes included in antihaemorrhoidal* products on the basis that their stimulation of nerve endings gives a sensation of cooling and tingling, which distracts from the sensation of pain.

- *Menthol and phenol also have antipruritic actions.*

Laxatives

- The short-term use of a laxative to relieve constipation might be considered.

- A stimulant laxative (e.g. *senna) could be supplied for 1 or* 2 days to help deal with the immediate problem while dietary fibre and fluids are being increased.

- For patients who cannot or choose not to adapt their diet, bulk laxatives may be used long term.

Practical points
Self-diagnosis

- Patients may say that they have piles, or think they have piles, but careful questioning by the pharmacist is needed to check whether this self-diagnosis is correct.

- If there is any doubt, referral is the best course of action.

Hygiene

- The itching of haemorrhoids can often be improved by good anal hygiene, since the presence of small amounts of faecal matter can cause itching.

- The perianal area should be washed with warm water as frequently as is practicable, ideally after each bowel movement.

- Soap will tend to dry the skin and could make itching worse, but a mild soap could be tried if the patient wishes to do so.

- Moist toilet tissues are available and these can be very useful where washing is not practical, for example, at work during the daytime, and some patients prefer them.

- These tissues are better used with a patting rather than a rubbing motion, which might aggravate symptoms.

- Many people with haemorrhoids find that a warm bath soothes their discomfort.

How to use OTC products

- Ointments and creams can be used for internal and external haemorrhoids and should be applied
  - in the morning,
  - at night and
  - after each bowel movement.

- An applicator is included in packs of ointments and creams and patients should be advised to take care in its use, to avoid any further damage to the perianal skin.

- Suppositories can be recommended for internal haemorrhoids.

- After removing the foil or plastic packaging (patients have been known to try and insert them with the packaging left on), a suppository should be inserted in the morning, at night and after bowel movements.

- Insertion is easier if the patient is crouching or lying down.

Case 1

- Tom Harris, a customer whom you know quite well, asks if you can recommend something for his usual problem. You ask him to tell you
- more about it: Mr Harris suffers from piles occasionally; you have
- dispensed prescriptions for Anusol HC and similar products in the
- past and have previously advised him about dietary fibre and fluid
- intake. He has been away on holiday for 2 weeks and says he has not
- been eating the same foods he does when at home. His symptoms are itching and irritation of the perianal area but no pain and he has a
- small swelling, which hangs down from the anus after he has passed
- a motion, but which he is able to push back again. He is a little
- constipated, but he is not taking any medicines.

Case 2

- Mr Briggs is a local shopkeeper in his late 50s who wants you to
- recommend something for his piles. He tells you that he has had them
- for quite a while – a couple of months. He has tried several different
- ointments and suppositories, all to no avail. The main problem now
- is bleeding, which has become worse. In fact he tells you, somewhat
- embarrassed, that he has been buying sanitary towels because this is
- the only way he can prevent his clothes from becoming stained. He is
- not constipated and has no pain.

Case 3

- Caroline Andrews is a young woman in her mid-20s, who works as a
- graphic designer in a local art studio. She asks your advice about an
- embarrassing problem: she is finding it very painful to pass motions.
- On questioning, she tells you that she has had the problem for a few
- days and has been constipated for about 2 weeks. She eats a diet
- that sounds relatively low in fibre and has been eating less than usual
- because she has been very busy at work. Caroline says she seldom
- takes any exercise. She takes the contraceptive pill but is not taking
- any medicines and has no other symptoms such as rectal bleeding.