Rectal Bleeding (Blood in Faeces)

There are many causes of rectal bleeding. The severity can vary from mild bleeding (common) to a severe life-threatening bleeding (uncommon). If the bleeding is heavy or if you have black stools (faeces) - older blood due to a bleed from high up in the gut - then see a doctor immediately or call an ambulance. However, it is often a mild bleed. In this situation, make an appointment with your doctor so that the cause can be found.

What is rectal bleeding?

The term rectal bleeding is used by doctors to mean any blood that is passed out when you go to the toilet to pass stools (faeces). However, not all bleeding that is passed out actually comes from the back passage (rectum). The blood can come from anywhere in the gut. The more correct term is gastrointestinal tract bleeding, often abbreviated to GI bleeding. There are many causes of rectal bleeding (GI bleeding) which are discussed later.

What is the gut?

The gut (gastrointestinal tract) starts at the mouth and ends at the anus. When we eat or drink, the food and liquid travel down the gullet (oesophagus) into the stomach. The stomach starts to break up the food and then passes it into the small intestine.
The small intestine (sometimes called the small bowel) is several metres long and is where food is digested and absorbed. Undigested food, water and waste products are then passed into the large intestine (sometimes called the large bowel). The main part of the large intestine is called the colon, which is about 150 cm long. This is split into four sections: the ascending, transverse, descending and sigmoid colon. Some water and salts are absorbed into the body from the colon. The colon leads into the back passage (rectum) which is about 15 cm long. The rectum stores stools (faeces) before they are passed out from the anus.

Types of rectal bleeding/GI tract bleeding
When you have GI bleeding, the things that a doctor needs to assess include the following:

How bad (severe) the bleeding is
Bleeding can range from a mild trickle to a massive life-threatening severe bleed (haemorrhage). In most cases the bleed is mild and intermittent. In this situation, any tests that need to be done can be done as an outpatient. There is no immediate risk to life with mild, intermittent GI bleeding. However, always report to a doctor if you have a large amount of bleeding, as a lot of blood loss needs urgent treatment.

Sometimes bleeding from a condition in the gut (GI tract) is so mild (like a slight trickle) that you do not notice any actual bleeding and it is not enough to change the colour of your stools (faeces). However, a test of your faeces can detect even small amounts of blood. This test may be done in various situations (described later).

Where the bleeding is coming from
Bleeding can come from anywhere in the GI tract. As a general rule:

- Bleeding from the anus or low down in the back passage (rectum) - the blood tends to be bright red and fresh. It may not be mixed in with faeces but instead you may notice blood after passing faeces, or streaks of blood covering faeces. For example, bleeding from an anal tear (fissure) or from haemorrhoids (described later).
- Bleeding from the colon - often the blood is mixed up with faeces. The blood may be a darker red. For example, bleeding from colitis, diverticular disease, or from a bowel tumour. However, sometimes, if the bleeding is brisk then you may still get bright red blood not mixed up too much with faeces. For example, if you have a sudden large bleed from a diverticulum (described later).
- Bleeding from the stomach or small intestine - the blood has far to travel along the gut before it is passed out. During the time it takes to do this the blood becomes altered and dark and mixes with faeces. This can make your faeces turn a black or plum colour - this is called melaena. For example, this may occur due to a bleeding stomach or duodenal ulcer. Note: if you have melaena it is a medical emergency, as it usually indicates a lot of bleeding that is coming from the stomach or duodenum. You should tell a doctor immediately if you suspect that you have melaena.

The cause of the bleeding
A doctor may ask various questions to get an idea as to the main possible causes of the bleeding. So, for example, you may be asked about possible symptoms. You may be asked about:

- Whether you have any pain.
- If you have any pain, where it is and what type of pain it is.
- Any itching around your bottom.
- Any change in your bowels, such as diarrhoea or constipation.
- Any weight loss.
- Any history in your family of bowel disease.

The doctor is then likely to examine you. This may include examining your back passage (anus and rectum) by inserting a gloved finger into your anus. Sometimes they may use an instrument called a proctoscope to look a little way inside your back passage. Sometimes, a diagnosis can be made after this. For example, of an anal fissure or pile (haemorrhoid). However, further tests are commonly needed to clarify the cause. This is because the examining finger or the proctoscope can only go a short way up your GI tract. If no cause is found, the bleeding may be coming from higher up.

**What are the causes of rectal bleeding/GI tract bleeding?**

There are many possible causes. Below is a brief overview of the more common causes:

**Piles (haemorrhoids)**

Haemorrhoids are swellings that can occur in the anus and lower back passage (lower rectum). There is a network of small blood vessels (veins) within the inside lining of the anus and lower rectum. These veins sometimes become wider and filled with more blood than usual. These swollen (engorged) veins and the overlying tissue may then form into one or more small swellings called haemorrhoids. Haemorrhoids are very common and many people develop one or more haemorrhoids at some stage. Small haemorrhoids are usually painless. The most common symptom is bleeding after going to the toilet. Larger haemorrhoids may cause a mucous discharge, some pain, irritation and itch. See separate leaflet called Piles (Haemorrhoids) for details.

**Anal fissure**

An anal fissure is a small tear of the skin of the anus. Although the tear of an anal fissure is usually small (usually less than a centimetre), it can be very painful because the anus is very sensitive. Often an anal fissure will bleed a little. You may notice blood after you pass stools (faeces). The blood is usually bright red and stains the toilet tissue but soon stops. See separate leaflet called Anal Fissure for details.

**Diverticula**

A diverticulum is a small pouch with a narrow neck that sticks out from the wall of the gut (intestines). Diverticula is the word used for more than one diverticulum. They can develop on any part of the gut but usually occur in the colon. Several diverticula may develop over time. A diverticulum may occasionally bleed and you may pass some blood via your anus. The bleeding is usually abrupt and painless. The bleeding is due to a burst blood vessel that sometimes occurs in the wall of a diverticulum and so the amount of blood loss can be heavy. Diverticula can cause other symptoms such as tummy pains and changes in the normal bowel habit. See separate leaflet called Diverticula (including Diverticulosis, Diverticular Disease and Diverticulitis) for details.

**Crohn's disease**

Crohn's disease is a condition which causes inflammation in the gut. The disease flares up from time to time. Symptoms vary, depending on the part of the gut affected and the severity of the condition. Common symptoms include bloody diarrhoea, tummy (abdominal) pain and feeling unwell. See separate leaflet called Crohn's Disease for details.

**Ulcerative colitis and other forms of colitis**

Ulcerative colitis (UC) is a disease where inflammation develops in the colon and rectum. A common symptom when the disease flares up is diarrhoea mixed with blood. The blood comes from ulcers that develop on the inner wall of the inflamed gut. There are other rare causes of inflammation of the colon (colitis) or inflammation of the rectum (proctitis) that can cause rectal bleeding. See separate leaflet called Ulcerative Colitis for details.
Polyps
A bowel polyp is a small growth that sometimes forms on the inside lining of the colon or rectum. Most develop in older people. Polyps are non-cancerous (benign) and usually cause no problems. However, sometimes a polyp bleeds and sometimes a polyp can turn cancerous. See separate leaflet called Bowel (Colonic) Polyps for details.

Cancer
Cancer of the colon and rectum are common cancers in older people. They sometimes affect younger people. Rectal bleeding is one symptom that may occur. Bleeding is often not visible (occult - see later) and other symptoms are often present before visible bleeding occurs. For example, weight loss, tiredness due to blood loss (anaemia), diarrhoea or constipation. Cancers of other parts of the gut higher up from the colon sometimes cause rectal bleeding but these are uncommon. See separate leaflet called Bowel (Colorectal) Cancer for details.

Angiodysplasia
Angiodysplasia is a condition where you develop a number of enlarged blood vessels within the inner lining of the colon. Angiodysplasia most commonly develops in the ascending (right) colon, but they can develop anywhere in the colon. The cause is unknown but they occur most commonly in older people. Bleeding from an angiodysplasia is painless. The blood seen can range from bright red brisk bleeding, to dark blood mixed with faeces, to black- or plum-coloured faeces (melaena). An angiodysplasia may also cause non-visible (occult) blood loss (see below).

Abnormalities of the gut
Various abnormalities of the gut or the gut wall may cause rectal bleeding in young children. Examples include:

- Volvulus - a twisting of the gut.
- Intussusception - one part of the gut is sucked into another, creating a blockage.
- Meckel's diverticulum - an extra bulge or pouch in the small intestine, present from birth (congenital).
- Hirschsprung's disease - a condition where a part of the lower bowel does not function as it should. The muscles of the bowel wall are unable to squeeze along the faeces as they should do.
- Abnormal blood vessel development.

Stomach and duodenal ulcers
An ulcer in the stomach or duodenum may bleed. This can cause melaena - where your faeces turn black- or plum-coloured as described earlier.

Some gut infections
These may cause bloody diarrhoea due to inflammation of the gut, caused by some infections.

There are various other rarer causes.

What should I do if I have rectal bleeding?
See a doctor. If the bleeding is heavy, or if you have black- or plum-coloured stools (faeces) - called melaena (described above), see a doctor immediately or call an ambulance. If you feel dizzy, collapse or feel generally unwell then consider calling an ambulance, as this might indicate a heavy bleed. However, often the bleeding is mild. In this situation, make an appointment with your doctor soon. Some people assume that their rectal bleeding is due to piles (haemorrhoids) and do not get it checked out. Haemorrhoids are perhaps the most common cause of rectal bleeding. However, you should not assume the bleeding is coming from a haemorrhoid unless you have been properly assessed by a doctor.

What tests might be advised?
It depends on the possible causes of the bleeding. This will be determined by a doctor talking to you (your history) and an examination. Usually one of the following tests is suggested:

- Sigmoidoscopy.
- Colonoscopy.
A virtual colonoscopy (CT colonography).

What is a colonoscopy?

A colonoscopy is a test where an operator (a doctor or nurse) looks into your colon. Normally you are not put to sleep for this test; however, you will be given an injection to make you drowsy (a sedative).

A colonoscope is a thin, flexible telescope. It is about as thick as a little finger. It is passed through the anus and into the colon. It can be pushed all the way along the inside of the colon as far as where the small and large intestines meet (the caecum).

The colonoscope contains fibre-optic channels which allow light to shine down so the operator can see inside your colon. This is done either by looking down the colonoscope or by attaching the colonoscope to a TV monitor.

The colonoscope also has a side channel down which devices can pass. These can be manipulated by the operator. For example, the operator may take a small sample (biopsy) from the inside lining of the colon by using a thin grabbing instrument which is passed down a side channel. See separate leaflet called Colonoscopy for details.

What is a sigmoidoscopy?

The sigmoid colon is the final portion of the bowel that is joined to the rectum. A sigmoidoscope is like a small telescope with an attached light source about the thickness of your finger. It is similar to a colonoscope but much shorter. A sigmoidoscopy is easier to do than a colonoscopy. It may be done instead of a colonoscopy if the bleeding is suspected to be coming from the lower colon or rectum. A doctor or nurse inserts the sigmoidoscope into the anus and pushes it slowly into the rectum and sigmoid colon. This allows the doctor or nurse to see the lining of the rectum and sigmoid colon. The procedure is not usually painful but it may be a little uncomfortable. See separate leaflet called Sigmoidoscopy for details.

What is a virtual colonoscopy?

A virtual colonoscopy (also called CT colonography) is a newer test. It allows the doctor to get a good view of the colon without passing the tube right up inside it. A tube is passed into the back passage (rectum) but does not have to go further up. With this tube, a gas is pushed into the bowel to open it up. A CT scan is then done of the bowel. This test is less uncomfortable and better tolerated than the traditional colonoscopy. It is usually used for people who are more frail and cannot tolerate a colonoscopy. However it is not available in all areas. See separate leaflet called CT Colonography for details.

What is a faecal occult blood (FOB) test?

The FOB test detects small amounts of blood in your stools (faeces) which you would not normally see or be aware of.

When and why is the FOB test done?
As discussed, there are several disorders which may cause bleeding into the gut. These may cause rectal bleeding which you can see. However, some of these disorders in some people may only bleed with a trickle of blood. If you only have a small amount of blood in your faeces then the faeces look normal. However, the FOB test will detect the blood. So, the test may be done if you have other symptoms that may suggest a gut problem. For example, persistent tummy (abdominal) pain, weight loss, etc. It may also be done to screen for bowel cancer before any symptoms develop (see below).

**Note:** the FOB test can only say that you are bleeding from somewhere in the gut. It cannot tell from which part. If the test is positive then further tests will usually be arranged to find the source of the bleeding. For example, colonoscopy.

**How is the FOB test done?**

A small sample of faeces is smeared on to a piece of card. You obtain a sample by using a small scraper to scrape some faeces off toilet tissue which you have just used after going to the toilet. The sample is tested by adding a chemical to the sample on the card. If there is a change in colour after adding the chemical, it indicates that some blood is present.

Usually two or three FOB tests are done on two or three separate samples of faeces, obtained on different days. This is because a bleeding disorder of the gut may only bleed now and then. So, not every sample may contain blood. A series of two or three samples done on several days may be more accurate in detecting a bleeding gut disorder.

See separate leaflet called Faecal Occult Blood test for more details.

**Screening for bowel cancer**

Screening means looking for early signs of a particular disease in otherwise healthy people who do not have any symptoms and when treatment is likely to be curative. Bowel cancer (colorectal cancer) screening aims to detect colorectal cancer at an early stage when there is a good chance that treatment will cure the cancer.

In the UK there is a screening programme for certain age groups. This involves testing three samples of your faeces for blood. The age group is slightly different in different parts of the UK. If you are in the relevant age groups, you will automatically be sent an invitation and then your FOB screening kit, so you can do the test at home. After your first screening test, you will then be sent another invitation and screening kit every two years until you reach the maximum age. You can then request further kits if you would like to continue to be included in the screening programme.

See separate leaflet called Screening for Bowel (Colorectal) Cancer for more details.

**What is the treatment for rectal bleeding?**

The treatment depends on the cause. See individual leaflets on the various diseases that can cause rectal bleeding.

**Further reading & references**

- Rectal bleeding: commissioning guide; Royal College of Surgeons - NICE accredited, 2013
- GI (lower) cancer - suspected; NICE CKS, June 2009 (UK access only)
- Haemorrhoids; NICE CKS, September 2012 (UK access only)

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