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Rectal Bleeding – what you should know

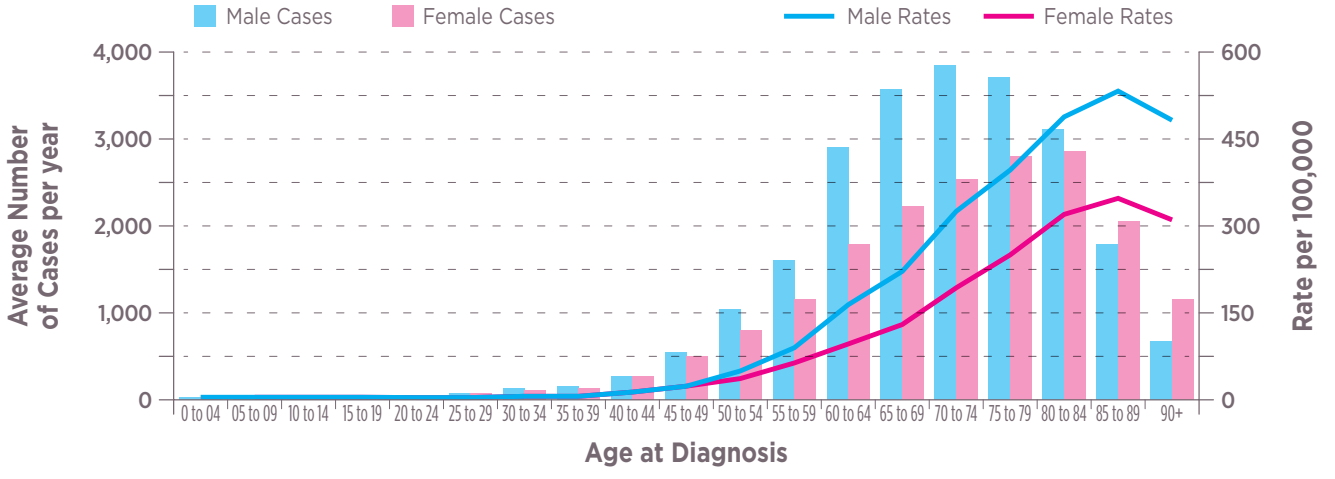
Introduction

Rectal bleeding is common. One year prevalence in the UK is in the order of 10% but the incidence and prevalence is poorly understood, as many patients do not report their symptoms. In most people, bleeding is intermittent and often self-limiting. The majority of patients with rectal bleeding will have benign anal conditions such as haemorrhoids or an anal fissure, but rectal bleeding may also be a symptom of inflammatory bowel disease or colorectal cancer. The difficulty arises in what to investigate and when.

Age can provide some help in this regard as colorectal cancer is very uncommon in the under 30 age group (see **fig 1**). However, it does still occur in this age group and therefore, it is my opinion that all significant rectal bleeding should be investigated by flexible sigmoidoscopy at the minimum.

Rectal bleeding presenting to primary care, has an overall positive predictive value (PPV) of up to 4.88% for colorectal cancer. This value has a tendency to rise with increasing age. Indeed, the new lower GI two week rule guidelines produced by NICE in June 2015 use a PPV of only 3% for urgent referral.

Figure 1. Bowel cancer age specific incidence rates and number of new cases per year 2011–2013



Based on this NICE guidance (NG12), new TWR guidelines have recently been published for London for urgent referral for suspected bowel cancer (see **fig 2**). The guidelines now suggest a TWR referral in patients of 50 years and over with unexplained rectal bleeding and for patients below 50 years if they have rectal bleeding associated with any of the following – change in bowel habit, abdominal pain, weight loss or iron deficiency anaemia.

There are many conditions that can cause rectal bleeding:

- Haemorrhoids (usually painless)
- Anal fissure (associated with pain)
- Proctitis – infective, radiation induced, idiopathic, IBD
- Angiodysplasia
- Colorectal cancer
- Diverticular disease
- Colonic polyps
- IBD
- Gastroenteritis
- Ischaemic colitis

History

Colour of blood – more distal bleeding tends to be brighter red colour becoming darker the more proximal. Caecal cancers frequently present just as iron deficiency anaemia for example.

Blood mixed with stool – the more proximal the bleeding, the more likely the blood will be mixed in with the stool rather than separate and "splashed around the pan". This, although quite dramatic, is more often associated with anal canal bleeding.

Amount – not a reliable symptom or sign. It is notoriously difficult to judge and a small amount of blood in the toilet can appear to be a lot. However, whether the bleeding is just on the paper or into the toilet pan can be a useful sign. Small amounts of blood onto the toilet paper associated with a sore bottom for example are most likely anal canal in nature.

Figure 2. New pan London urgent referral criteria for suspected lower GI cancer

Adults with:

- Abnormal lower GI investigations (colonoscopy/ flexible sigmoidoscopy/CT colonography) suggestive of cancer
- Any age with suspicious abdominal or rectal mass
- Any age with unexplained anal mass or ulceration
- ≥40 years with unexplained abdominal pain and weight loss
- ≥40 years with unexplained iron deficiency anaemia
- ≤50 years with rectal bleeding with any of the following unexplained symptoms:
  - Abdominal pain
  - Change in bowel habit
  - Weight loss
  - Iron deficiency anaemia
- ≥50 years with unexplained rectal bleeding
- ≥50 years with unexplained abdominal pain or weight loss
- ≥50 years with unexplained change in bowel habit
- ≥60 years with unexplained anaemia even in the absence of iron deficiency

Referral is due to clinical concerns that do not meet NICE/pan-London referral criteria (the GP must give full clinical details at the time of referral)

Pain – in younger age groups, bright red bleeding associated with pain on bowel movements is most likely due to an anal fissure (see **fig 4** and **fig 5**) whereas painless bright red bleeding is most likely due to haemorrhoids.

Change in bowel habit – this now, as previously mentioned, if associated with rectal bleeding in someone of 40 years or over, should trigger an urgent referral into secondary care for investigation.

Associated symptoms/signs – weight loss, anal lump/prolapse, the presence of acute diarrhoea and/or fever may be more indicative of an infective source.

Examination

Abdominal and rectal examination should be performed.

Internal haemorrhoids are not palpable on rectal examination.

A "tender external haemorrhoid" is often the sentinel skin tag associated with an anal fissure rather than a true haemorrhoid. The treatment therefore is the treatment of the anal fissure rather than surgical treatment of the skin tag. If a digital rectal examination is too painful, generally little is gained by perseverance and causing the patient pain. Often an anal fissure is visible in this situation (**fig 4** and **fig 5**) and treatment can be directed towards this. Clearly, other acutely painful anorectal conditions may be the cause also but these are usually clinically obvious (such as an acute perianal abscess or thrombosed external pile – **fig 3** and **fig 6**).

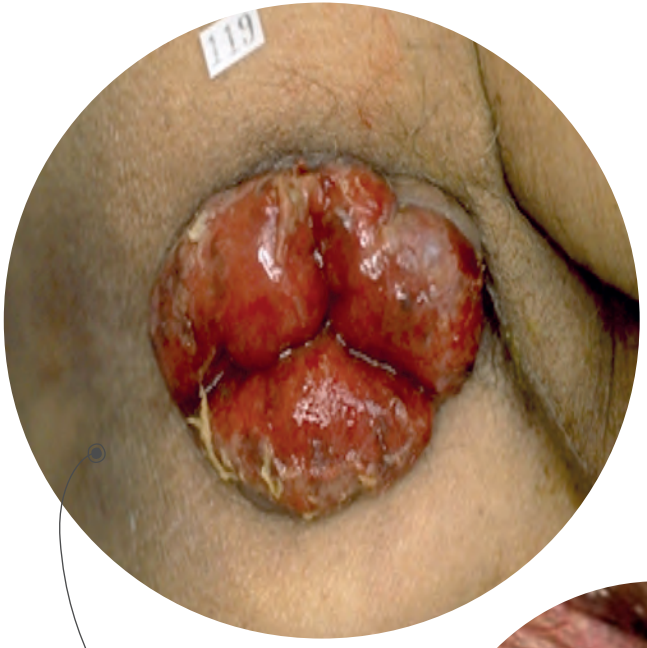


Figure 3. Acutely thrombosed haemorrhoids

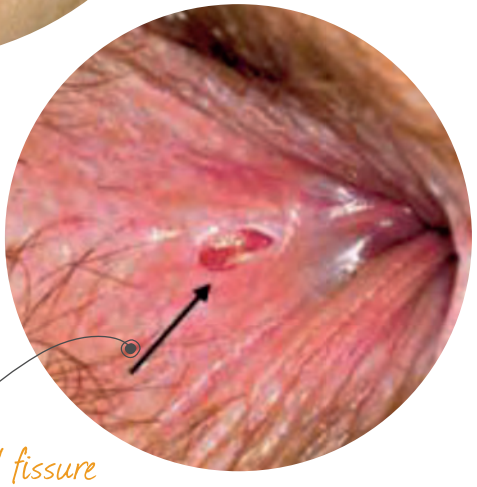


Figure 4. Anal fissure

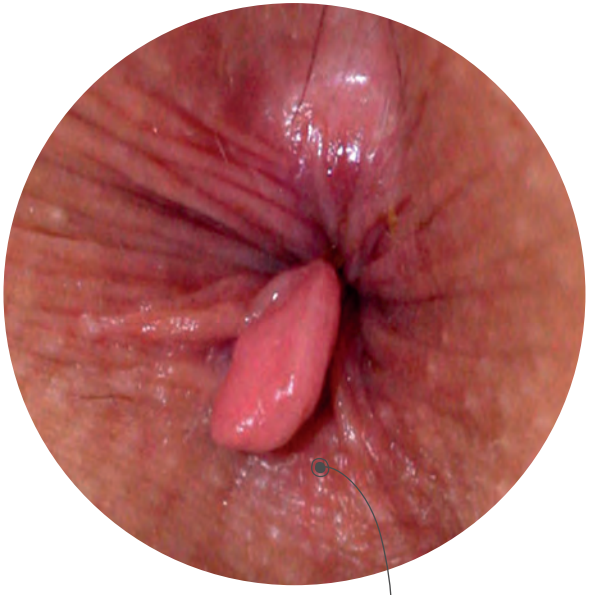


Figure 5. Sentinel tag of an anal fissure

Rectal examination may reveal an intraluminal mass but this is rare and the reaches of the index finger are not enough to exclude a serious cause for rectal bleeding in older age groups. Indeed, even a rigid sigmoidoscopy often performed in the colorectal clinic is not, in my opinion, adequate enough to investigate bright red rectal bleeding.

If there is an obvious source of blood and the patient is under 30, then a reasonable attempt can be made to treat the source and see if the bleeding settles, with a follow up appointment arranged as a safety net. If bleeding does not settle or the patient is older or has associated symptoms or family history, then referral for flexible sigmoidoscopy or colonoscopy should be undertaken.

Treatment

This is obviously directed towards the cause. Once malignancy has been ruled out (by colonoscopy, flexible sigmoidoscopy or CT colonogram) then the treatment of rectal bleeding can be more unhurried. Often, minimal haemorrhoidal bleeding can be left alone with simple reassurance. In fact, even more prolific bleeding can be treated conservatively as long as the patient is happy with this approach. As I say to patients, treatment of any condition is about risk and benefit and the benefits can only be judged by the patient themselves as it is them that experience the symptoms.

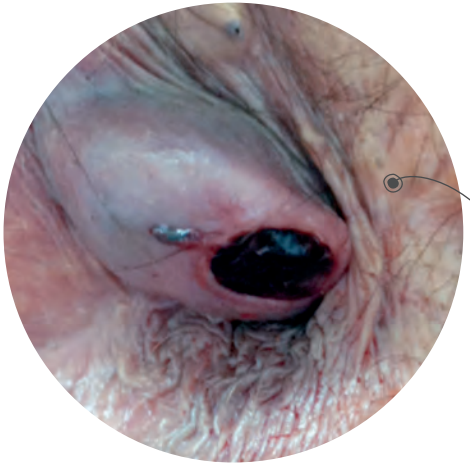


Figure 6
Perianal haematoma

I never inject haemorrhoids any more as this is associated with sepsis and other unacceptable complications. I do perform haemorrhoidal banding but much less than I used to, and I am now more inclined to treat haemorrhoidal bleeding with a Doppler guided haemorrhoidal artery ligation procedure (performed under general anaesthesia but a short recovery time of only a few days). Even haemorrhoidal prolapse can be treated with this technique but is not as effective as a haemorrhoidectomy (although the recovery time is significantly longer).

Anal fissures are initially treated with either GTN cream (0.4%) or Diltiazem cream (2%) topically. These treatments are both twice daily applications and treatment should continue for at least 8 weeks. Patients using GTN cream should be warned about the possible side effects of headache but also that this often resolves after a week or so of use. Diltiazem cream is usually better tolerated but it is more expensive and cannot be used in patients who are breastfeeding. During the course of both treatments, it is important to address any constipation with the regular use of laxatives if necessary. Failure of medical management usually then necessitates a surgical approach which is often fissurectomy and Botox (to relieve the sphincter spasm) in the first instance, followed by a lateral sphincterotomy in male patients if Botox also fails to work. Sphincterotomy in female patients is sometimes necessary, but should be used with extreme caution as this, combined with possible sphincter damage during childbirth and an anatomically shorter anal canal, can lead to incontinence issues in later life.

Summary

Rectal bleeding is extremely common but in most cases the cause is benign and self limiting requiring little or no treatment except that of reassurance. However, investigation is vital to make sure the cause of the bleeding is not from a more sinister cause.