Rectal bleeding is a common symptom in adults of all ages. The 1-year prevalence in adults is about 10% in the UK. As many as one in five primary care patients will report rectal bleeding in the previous year. In most people it is intermittent and self-limiting. Only a minority will seek medical attention. The majority of those who seek advice do so either because the symptoms are truly troublesome or they are concerned about an underlying sinister cause. In the vast majority of patients in primary care the cause will be benign and most often a benign anorectal condition such as haemorrhoids and/or an anal fissure. However, rectal bleeding may be a symptom of colorectal cancer or ulcerative colitis. Therein lies the dilemma for primary and secondary care doctors alike.

The Association of Coloproctology of Great Britain and Ireland, along with the Royal College of Surgeons, have recently updated their guidance on commissioning for the elective management and onward referral for diagnosis, investigation, and management of patients who experience rectal bleeding.1 It is not intended to guide commissioning relating to suspected cancer, and pathways already exist for: patients >50 years with unexplained rectal bleeding, who qualify for 2-week referral, as per National Institute for Health and Care Excellence guidance; asymptomatic patients in the NHS Bowel Cancer Screening Programme; investigation of occult gastrointestinal bleeding; or emergency management of major lower gastrointestinal haemorrhage. However, the issue for a GP is not only who to treat in general practice but also who to refer and which referral pathways to choose.

The 2-week referral pathway tends to be a colorectal cancer exclusion service, so does not always benefit the symptomatic patient with rectal bleeding. There may be little attention paid to the presenting symptoms once cancer has been excluded. Furthermore, colonoscopies are increasingly performed as part of a straight-to-test pathway and may be carried out by a gastroenterologist, colorectal surgeon, or nurse endoscopist. Colonoscopy is not a good investigation of anorectal pathology and often anorectal therapeutic procedures are not carried out at the time of index procedure.

Best practice in primary care will include careful attention to history: presence or absence of perianal symptoms, red-flag symptoms including weight loss, altered bowel habit, symptoms of anaemia, and family history of colorectal cancer. Rectal bleeding alone has a positive predictive value for colorectal malignancy of only 8% in patients aged >50 years presenting to primary care. Although age is helpful in orientating one’s differential diagnosis, it is important not to assume that because someone is young the cause will not be neoplastic, as this can lead to tragically late presentations. In the US the incidence of colorectal cancer is declining overall but is increasing among young adults.

Nearly one-third of rectal cancer patients are younger than 55 years of age3 and if a rectal cancer does bleed it will likely produce bright red blood and not necessarily mixed with stool. Rectal bleeding attributed to haemorrhoids represents the most common missed opportunity to establish a cancer diagnosis.4 Primary care clinicians need a high index of suspicion of other pathology if symptoms persist and/or the clinical course does not follow patterns suggestive of benign disease. Persistent symptoms require investigation.

Regardless of age, rectal bleeding is never directly caused by irritable bowel syndrome (IBS). Similarly, older people with new-onset anorectal bleeding should be investigated as their piles may have become symptomatic because of proximal pathology. Anaemia should not be attributed to haemorrhoids. The presence of identifiable anorectal conditions does not preclude more important proximal colorectal pathology or obviate the need for colonic investigation. Similarly, anticoagulants and antiplatelet drugs may potentiate rectal bleeding but should not be blamed as causative in their own right. In older people rectal bleeding and abdominal pain are often due to ischaemic colitis even in those known to have diverticulosis.

Endoscopic assessment of the bowel is the gold-standard investigation for bleeding, but other tests may be useful in selected cases. Complete endoscopic evaluation of the colon is indicated in select patients but didactic age cut-offs for colonoscopy and flexible sigmoidoscopy are difficult. Older patients will need to have a full colon investigation as appropriate, whereas younger, low-risk patients with rectal bleeding should be considered for flexible sigmoidoscopy. If other symptoms are present or there is a family history, then colonoscopy may be indicated.

There is no evidence for tumour markers such as carcinoembryonic antigen (CEA) as a diagnostic tool in patients with rectal bleeding. Likewise, faecal occult blood testing has no place in investigating patients with frank bleeding. Faecal calprotectin elevation is a well-established surrogate marker for diagnosing inflammatory bowel disease and distinguishing from diarrhoea-predominant IBS. There is a high positive predictive value for finding inflammatory bowel disease at colonoscopy when faecal calprotectin is significantly elevated.

“A systematic review from 2011 shows that investigation is warranted in primary care. However, there are a myriad of pathways to choose from. The challenge in primary care is to navigate these and select the most appropriate for best patient care.”
Although this use in diarrhoea investigation is well known, faecal calprotectin has also been shown to have a high negative predictive value in the region of 98% for colorectal cancer in rapid-access referral patients, and might be helpful in selecting out symptomatic patients who could be referred on a routine pathway. Marginal elevations of faecal calprotectin may be seen with non-steroidal anti-inflammatory drug (NSAID) ingestion or regular use of proton-pump inhibitors. NSAIDs may also be causative of bleeding.

The majority of cases of rectal bleeding in primary care are due to haemorrhoids. However, haemorrhoids do not usually cause pain unless thrombosed. Pain at defaecation associated with rectal bleeding is due to an anal fissure until proven otherwise. It is not always possible to see a fissure and often the diagnosis comes from the history alone. An acute anal fissure is a tear in the skin of the anal canal, and may be treated with dietary advice, bulking agents, and fluids. A chronic anal fissure (symptoms >6 weeks) may benefit from topical glyceryl trinitrate (GTN) 0.4% ointment with appropriate advice about application and duration of treatment. However, compliance with this is often poor due to its vasodilator effect, with headache usually in 25% of patients. Topical treatments are unlikely to leave rectal bleeding uninvestigated. A systematic review from 2011 shows that investigation is warranted in primary care. However, there are a myriad of pathways to choose from. The challenge in primary care is to navigate these and select the most appropriate for best patient care.

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