

bright red blood seen either in the toilet or upon wiping. Occasional patients can present with significant bleeding, which may be a cause of anemia; however, the presence of a colonic neoplasm must be ruled out in anemic patients. Patients who present with a protruding mass complain about inability to maintain perianal hygiene and are often concerned about the presence of a malignancy.

The diagnosis of hemorrhoidal disease is made on physical examination. Inspection of the perianal region for evidence of thrombosis or excoriation is performed, followed by a careful digital examination. Anoscopy is performed paying particular attention to the known position of hemorrhoidal disease. The patient is asked to strain. If this is difficult for the patient, the maneuver can be performed while sitting on a toilet. The physician is notified when the tissue prolapses. It is important to differentiate the circumferential appearance of a full-thickness rectal prolapse from the radial nature of prolapsing hemorrhoids (see “Rectal Prolapse,” above). The stage and location of the hemorrhoidal complexes are defined.

TREATMENT HEMORRHOIDAL DISEASE

The treatment for bleeding hemorrhoids is based on the stage of the disease (Table 353-5). In all patients with bleeding, the possibility of other causes must be considered. In young patients without a family history of colorectal cancer, the hemorrhoidal disease may be treated first and a colonoscopic examination performed if the bleeding continues. Older patients who have not had colorectal cancer screening should undergo colonoscopy or flexible sigmoidoscopy.

With rare exceptions, the acutely thrombosed hemorrhoid can be excised within the first 72 h by performing an elliptical excision. Sitz baths, fiber, and stool softeners are prescribed. Additional therapy for bleeding hemorrhoids includes the office procedures of banding and sclerotherapy. Sensation begins at the dentate line; therefore, banding or sclerotherapy can be performed without discomfort in the office. Bands are placed around the engorged tissue, causing ischemia and fibrosis. This aids in fixing the tissue proximally in the anal canal. Patients may complain of a dull ache for 24 h following band application. During sclerotherapy, 1–2 mL of a sclerosant (usually sodium tetradecyl sulfate) is injected using a 25-gauge needle into the submucosa of the hemorrhoidal complex. Care must be taken not to inject the anal canal circumferentially, or stenosis may occur.

For surgical management of hemorrhoidal disease, excisional hemorrhoidectomy, transhemorrhoidal dearterialization (THD), or stapled hemorrhoidectomy (“the procedure for prolapse or hemorrhoids” [PPH]) is the procedure of choice. All surgical methods of management are equally effective in the treatment of symptomatic third- and fourth-degree hemorrhoids. However, because the sutured hemorrhoidectomy involves the removal of redundant tissue down to the anal verge, unpleasant anal skin tags are removed as well. The stapled hemorrhoidectomy is associated with less discomfort; however, this procedure does not remove anal skin tags. THD uses ultrasound guidance to ligate the blood supply to the anal tissue, hence reducing hemorrhoidal engorgement. No procedures on hemorrhoids should be done in patients who are immunocompromised or who have active proctitis. Furthermore, emergent hemorrhoidectomy for bleeding hemorrhoids is associated with a higher complication rate.

Acute complications associated with the treatment of hemorrhoids include pain, infection, recurrent bleeding, and urinary retention. Care should be taken to place bands properly and to avoid overhydration in patients undergoing operative hemorrhoidectomy. Late complications include fecal incontinence as a result of injury to the sphincter during the dissection. Anal stenosis may develop from overzealous excision, with loss of mucosal skin bridges for reepithelialization. Finally, an *ectropion* (prolapse of rectal mucosa from the anal canal) may develop. Patients with an ectropion complain of a “wet” anus as a result of inability to prevent soiling once the rectal mucosa is exposed below the dentate line.

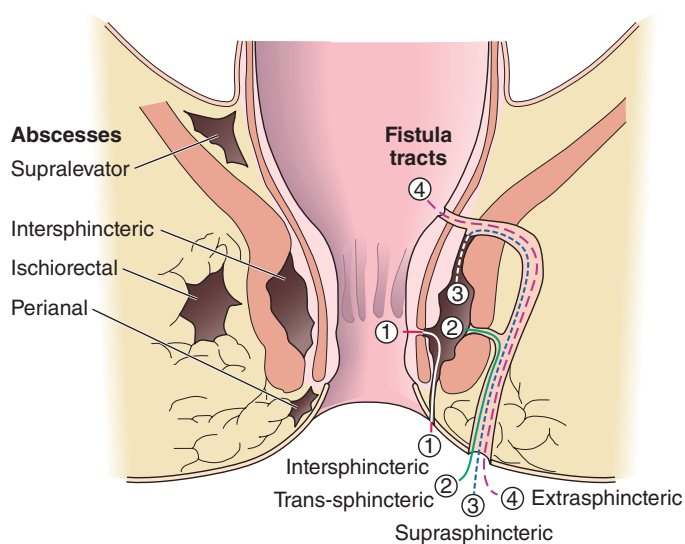


FIGURE 353-7 Common locations of anorectal abscess (*left*) and fistula in ano (*right*).

ANORECTAL ABSCESS

Incidence and Epidemiology The development of a perianal abscess is more common in men than women by a ratio of 3:1. The peak incidence is in the third to fifth decade of life. Perianal pain associated with the presence of an abscess accounts for 15% of office visits to a colorectal surgeon. The disease is more prevalent in immunocompromised patients such as those with diabetes, hematologic disorders, or inflammatory bowel disease and persons who are HIV positive. These disorders should be considered in patients with recurrent perianal infections.

Anatomy and Pathophysiology An anorectal abscess is an abnormal fluid-containing cavity in the anorectal region. Anorectal abscess results from an infection involving the glands surrounding the anal canal. Normally, these glands release mucus into the anal canal, which aids in defecation. When stool accidentally enters the anal glands, the glands become infected and an abscess develops. Anorectal abscesses are perianal in 40–50% of patients, ischiorectal in 20–25%, intersphincteric in 2–5%, and supralelevator in 2.5% (Fig. 353-7).

Presentation and Evaluation Perianal pain and fever are the hallmarks of an abscess. Patients may have difficulty voiding and have blood in the stool. A prostatic abscess may present with similar complaints, including dysuria. Patients with a prostatic abscess will often have a history of recurrent sexually transmitted diseases. On physical examination, a large fluctuant area is usually readily visible. Routine laboratory evaluation shows an elevated white blood cell count. Diagnostic procedures are rarely necessary unless evaluating a recurrent abscess. A CT scan or MRI has an accuracy of 80% in determining incomplete drainage. If there is a concern about the presence of inflammatory bowel disease, a rigid or flexible sigmoidoscopic examination may be done at the time of drainage to evaluate for inflammation within the rectosigmoid region. A more complete evaluation for Crohn’s disease would include a full colonoscopy and small-bowel series.

TREATMENT ANORECTAL ABSCESS

As with all abscesses, the “gold standard” is drainage. Office drainage of an uncomplicated anorectal abscess may suffice. A small incision close to the anal verge is made, and a Mallenkot drain is advanced into the abscess cavity. For patients who have a complicated abscess or who are diabetic or immunocompromised, drainage should be performed in an operating room under anesthesia. These patients are at greater risk for developing necrotizing fasciitis. There is limited role of antibiotics in management of anorectal abscesses. The antibiotics are only warranted in patients who are