

# Anal fissures

Mark A. Dykstra MD, W. Donald Buie MD

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## 1 Anal fissures may be acute or chronic

An anal fissure is a tear in the anal mucosa, most often caused by trauma, such as passing a large bowel movement. Fissures of less than 6–8 weeks' duration are acute, and those persisting longer are chronic. Chronic fissures are associated with external sentinel skin tags, exposed internal sphincter muscle fibres, and a hypertrophied anal papilla.<sup>1</sup>

## 2 Fissures that are off midline require further investigation

Ninety percent of fissures are located in the anterior or posterior midline. Fissures that are not midline may be associated with malignancy, Crohn disease, HIV, syphilis or tuberculosis. Fissures in atypical locations should undergo further work-up to rule out other causes.<sup>2</sup>

## 3 Most fissures will resolve with conservative or medical management

Up to 87% of acute fissures treated with a high-fibre diet or stool-bulking agents (e.g., psyllium) and sitz baths twice daily will resolve.<sup>3</sup> Patients with chronic fissures require the addition of topical smooth muscle relaxants (e.g., diltiazem). Medical management will heal chronic fissures in 65%–95% of patients.<sup>4</sup>

## 4 Topical calcium channel blockers are recommended as first-line medical therapy for chronic fissures

There is strong evidence that topical calcium channel blockers have fewer adverse effects and similar fissure healing rates when compared with topical nitrates.<sup>4</sup> No difference in healing rate was shown when different calcium channel blockers were compared.<sup>5</sup> Patients whose fissures do not resolve after 6–8 weeks of medical management should be referred for consideration of botulinum toxin injection or surgical management.<sup>4</sup>

## 5 The presence of fissure should not preclude investigation of rectal bleeding for patients at higher risk

Even with classic symptoms and a midline fissure, patients with new rectal bleeding who are older than 50 years or have any red flags (e.g., weight loss, change in bowel habits, unexplained anemia or family history) require evaluation with endoscopy to rule out a more proximal cause of bleeding.<sup>4,6</sup>

## References

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**Affiliation:** Department of Surgery, Foothills Medical Centre, Calgary, Alta.

**Correspondence to:** Mark Dykstra, madykstr@ualberta.ca

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