How to assess a rectal prolapse

KATIE ELLARD MB BS, FRACP

Rectal prolapse can be distressing for the patient. It is basically a problem of plumbing, and appropriate inspection can usually diagnose it.

Rectal prolapse is a relatively uncommon but quite disabling condition. In children, the incidence is similar for boys and girls. However, it is much more common in females than males in adult life. It is generally associated with straining at stool over a long period of time. The symptoms depend on the degree of prolapse.

Clinical features

In children

Rectal prolapse in children is typically noted by a parent, who reports that there is a red mass that comes out of the anus during defaecation. By the time you see the patient, it has resolved.

Prolapse may not be associated with any discomfort. However, occasionally the parent reports that there is some blood or mucus on the child's underwear or associated with the stool.

Most children with rectal prolapse are perfectly well. Rarely, it is associated with neurological disorders such as spina bifida. It also occurs in cystic fibrosis, so all children with rectal prolapse should have a sweat test.

In general, the problem resolves as the children grow older, as the angle of the rectum changes and the rectum becomes more anchored to the sacrum. Conservative management is generally all that is required.

Dr Ellard is a gastroenterologist in private practice in St Leonards, NSW.

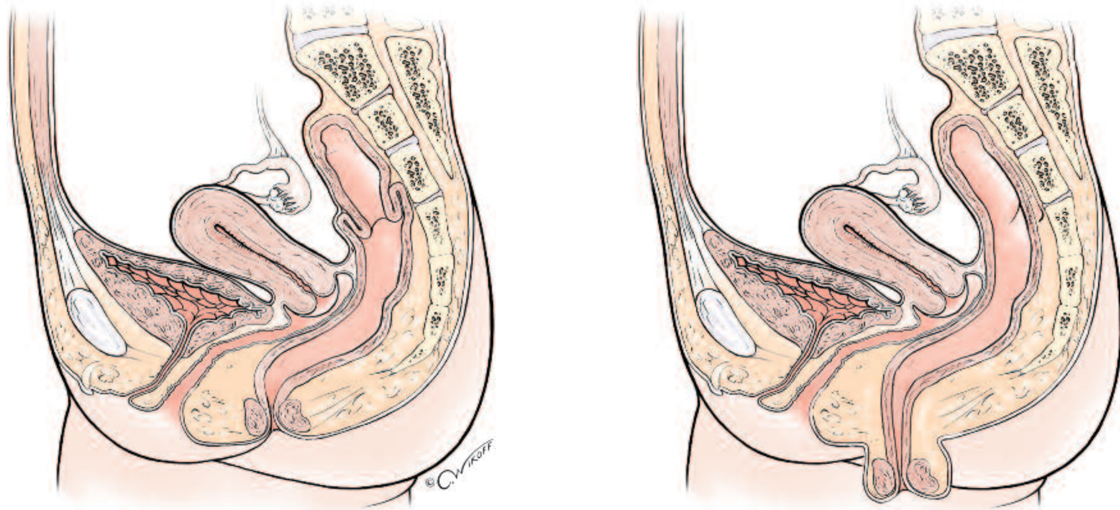
In adults

The symptoms in adults depend on the severity of the prolapse (Figures 1a and b).

The most disabling is a complete rectal prolapse (also called procidentia) where there is a circumferential protrusion of the full thickness of the rectum through the anus. This may occur only at the time of defaecation or may become permanent. Generally, patients are aware that 'something' comes out of their back passage when they go to the toilet, although they may be uncertain as to what it is. They may 'push it back' themselves. This naturally causes anxiety and distress as well as discomfort. Patients also report blood and mucus on the underpants or toilet paper or associated with the motion. Quite often there is associated faecal incontinence even if the prolapse is not permanent.

A partial prolapse – with an intussusception of the rectal wall that does not extend through the anus – can also be responsible for blood and mucus, tenesmus and a feeling of incomplete evacuation. This causes the patient to strain further, worsening the prolapse.

The third category of prolapse is when prolapse is limited to the mucosa



© CHRIS WIKOFF, 2000

Figures 1a and b. Degrees of rectal prolapse. a (left). Intussusception as the first step. b (right). Complete prolapse.

Downloaded for personal use only. No other uses permitted without permission. © MedicineToday 2000.

of the rectum only. This is associated with similar but less disabling symptoms to those of a full thickness prolapse.

Physical examination

A complete rectal prolapse is obvious on examination of the anus and rectum. The mucosa extends through the anal sphincter and is generally cherry red and oedematous (Figure 2). There is often associated ulceration. Circumferential rings can also be seen (Figure 3a).

A gentle digital examination should be done to make sure that there is no evidence of a polyp or carcinoma acting as a lead point for the intussusception. The full thickness of the rectal mucosa can be appreciated between the thumb and forefinger.

If the prolapse is episodic, it may not be visible on inspection. However, it is important to assess the anus. The anal sphincter is often quite patulous in a person with a history of prolapse. This is one of the reasons for the faecal incontinence. There may also be excoriation of the skin around the anus due to the production of mucus making the skin continuously wet.

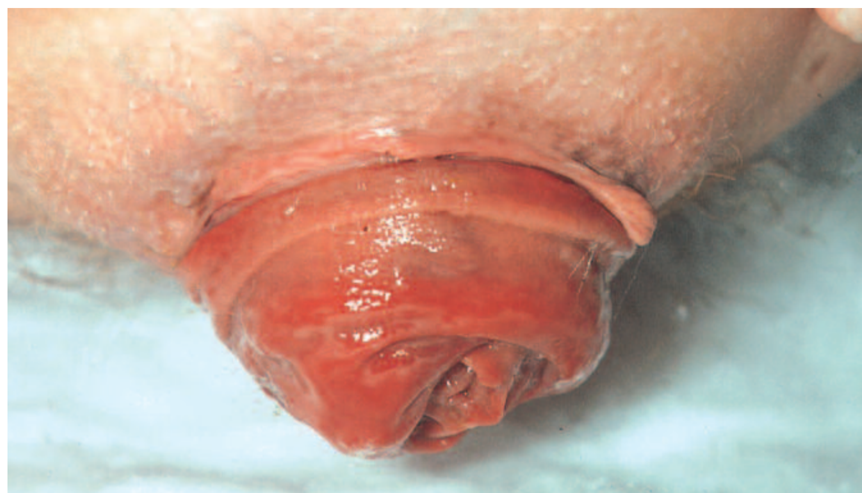

COURTESY OF ASSOCIATE PROFESSOR MARGARET SCHNITZLER, ST LEONARDS, NSW.

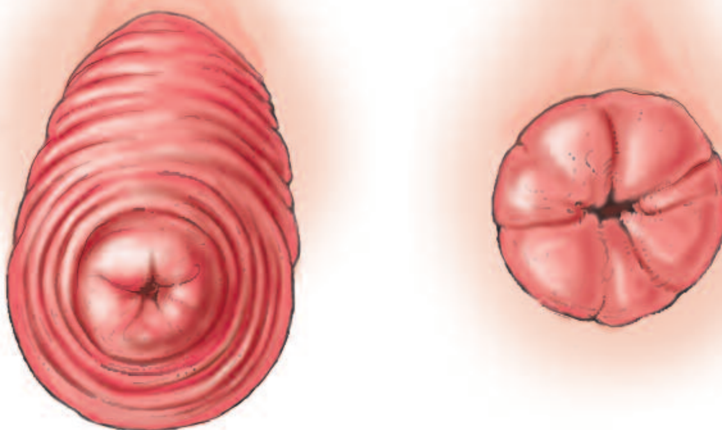
Figure 2. A complete (full thickness) rectal prolapse.

Assessing the prolapse

It can be difficult to precipitate a prolapse. The old surgical texts all advise that it is important to ask the patients to squat over some newspapers on the consulting room floor, and then request that they strain as if at stool. One's own position during this exercise was not always apparent. Patients may have complied with this request in NHS outpatient clinics in London teaching hospitals, but I doubt it would be greeted with great enthusiasm in my middle class practice.

The best way to test for prolapse is to take the patient into a bathroom, ask him or her to sit on a toilet to strain and then peer down over the patient's back to see if any rectal prolapse is visible. However, this may not be practical or, once again, the patient may not wish to go through the process. If that is the case, all that one can do is examine the patient in the usual position for a rectal examination – the patient lying on his or her left side with the knees drawn up towards the chest. Unfortunately, this position is very poor at precipitating prolapse because it does not mimic the physiological strains of normal defaecation.

First of all, observe the anus to see if it is patulous and check the surrounding skin. Then ask the patient to strain. Occasionally the prolapse will become visible. If that does not happen, ask the patient to relax and proceed to do a rectal examination. In about 30% of patients, it is possible to feel the leading edge of the intussusception during a simple digital exam. Assess the anal tone further by


© CHRIS WIKOFF, 2000

Figures 3a and b. Comparison of complete and mucosal prolapse. a (left). The circumferential folds of complete rectal prolapse. b (right). The radial folds of mucosal prolapse.

Downloaded for personal use only. No other uses permitted without permission. © MedicineToday 2000.

asking the patient to squeeze the anus around your finger. Frequently there will be no appreciable change on the squeeze test because the anal tone is poor.

Ask the patient to relax, remove your finger and then, if you feel confident to do so, perform a proctoscopy. In rectal prolapse the lower 8 to 10 cm of mucosa may be oedematous, particularly anteriorly, and there may be quite a deal of mucus visible.

Distinguishing a complete prolapse from a mucosal one

On occasion, it can be difficult to distinguish a full thickness rectal prolapse from a mucosal prolapse. Generally, a full thickness rectal prolapse has circumferential folds (Figure 3a), whereas a mucosal prolapse has radial folds (Figure 3b). A mucosal prolapse is unlikely to be more than 5 cm outside the anus; a rectal prolapse can be up to 40 cm outside the anus. The position of the anal sphincter is normal in a rectal prolapse, whereas it is everted in a mucosal prolapse. Gentle palpation should be able to reveal two thin layers of mucosa in a mucosal prolapse, whereas a rectal prolapse is much thicker, consisting of two layers of rectal wall.

Solitary rectal ulcer syndrome

A very rare association of rectal prolapse is the solitary rectal ulcer syndrome.

Solitary rectal ulcer syndrome is most commonly seen in young women. It causes rectal bleeding, excessive mucus, and an almost constant feeling of a need to strain to empty the rectum. Most patients give a history of constipation or irritable bowel syndrome. It is associated with very long periods of straining at stool, sometimes hours every day. It is also common to obtain a history of a patient using his or her finger to remove small amounts of faeces. This practice should be firmly discouraged because it can damage the anal sphincter and the mucosa of the rectum.

A solitary rectal ulcer is usually placed anteriorly in the rectum and may feel very abnormal on examination. The area is often quite nodular and hard. Proctoscopy may reveal changes that raise the possibility of a rectal cancer, and biopsy helps to confirm the diagnosis of solitary rectal ulcer syndrome.

Some of the women with this condition appear to have pelvic floor dysfunction, which may require further investigation and specific treatment such as biofeedback.

On occasion, surgery is required, aimed at correcting prolapse. It is not sufficient to resect the ulcer.

Downloaded for personal use only. No other uses permitted without permission. © MedicineToday 2000.

Treatment of rectal prolapse

There are scores of operations described for the correction of rectal prolapse, and surgical treatment is beyond the scope of this short article. However, a few points are worth making.

Children, particularly those under the age of 4 years, have a very good prognosis. Parents, however, require support and reassurance, and it is appropriate to check on the child's fibre and fluid intake.

In adults, a permanent full thickness rectal prolapse requires surgery. The type of operation performed will depend on the degree of prolapse and the age and health of the patient. However, it should be emphasised that it is very much in the patient's best interest to do everything possible to correct the prolapse. Long term rectal prolapse will almost inevitably lead to faecal incontinence, which is a social and often psychological disaster. There are a number of limited procedures that can be performed under light sedation or local anaesthetic that greatly improve prolapse and reduce the likelihood of incontinence. Referral for a further assessment is generally worthwhile no matter how elderly or infirm the patient.

Many people with partial prolapse or mucosal prolapse respond to simple advice that they should not strain at stool. It is surprising, however, how difficult some people find it to comply with this.

Some patients will need direction on diet, fluid intake and exercise, and stool softeners may be useful. It is also important to explain how the prolapse itself can lead to a sensation of faeces being present in the rectum and that it is very important not to strain just because the sensation is present. Occasionally, a doubtful patient can be reassured by the use of a glycerine suppository – when the suppository does not result in any faeces, the patient can believe that what he or she is feeling is the prolapse rather than a motion.

If there is doubt or if simple measures don't appear to be likely to be effective, referral to a gastroenterologist or surgeon is appropriate. On occasion, further investigations such as defaecography or electrophysiological testing may be required. However, rectal prolapse is basically a problem of plumbing and generally simple measures such as appropriate inspection can diagnose it. MT

Further reading

1. Lowry AC, Goldberg SM. Internal and overt rectal procidentia. Gastroenterol Clin North Am 1987; 16(1): 47-70.

Downloaded for personal use only. No other uses permitted without permission. © MedicineToday 2000.