



# Pruritus ani

**BACKGROUND** Pruritus ani is a common presenting problem in general practice, one that is particularly distressing to patients. However, there is little available research on which to base management.

**OBJECTIVE** This article discusses the causes and management of this distressing symptom based on the current available evidence.

**DISCUSSION** Perianal itch probably arises from localised inflammation. This may be the result of anorectal disease, skin disorders, excessive cleaning, application of local irritants or other causes. In children, perianal itch may be caused by intestinal hermetic infection such as pinworm. Whatever the initial cause, the problem may at times become chronic, with scratching inflaming the area and more itching resulting. Avoiding trauma from excess washing, toilet paper and topical agents is important. Treatments likely to be effective are emollients such as sorbolene, a short course of topical hydrocortisone cream and capsaicin cream.

**P** ruritus ani may be the least researched everyday symptom from which humans suffer. There are but a handful of randomised trials published in refereed journals since 1956. In contrast, there is a large amount of information in review articles and on the internet. This would suggest that the condition is common, and that people seek solutions to the problem. There are a few consistent statements in the available literature – which as McCormak states,<sup>1</sup> is no reason to believe that these are true. This article is based on the current available literature.

## Aetiology

Perianal itch is physical,<sup>2</sup> not psychological,<sup>3</sup> and common. It is the skin immediately adjacent to the anal margin that is most often affected, although it is clear that symptoms may be located in natal cleft or anteriorly up to and including the vulva or scrotum. In many cases the initial cause may be resolving inflammation associated with a small haemorrhoid or anal fissure. Perianal itch has even been reported as a symptom following a retained rectal foreign object. Heat, sweating and sitting, probably exacerbate the problem.

A local reaction to contact with faeces has been implicated. There is no evidence that the microbial content of faeces is different,<sup>4</sup> or that any fungal or yeast organisms are the primary cause,<sup>5</sup> as these opportunistic infections almost always cease when the problem resolves. Food content has also been implicated – one paediatric case where ingestion of yoghurt repeatedly led to a reaction of the perianal skin has been documented,<sup>6</sup> while authoritative papers<sup>7</sup> and websites<sup>8</sup> mention a similar response to tomatoes, citrus fruits, and spicy foods among others.

Altered internal anal sphincter characteristics have been described,<sup>9</sup> adding weight to the contention that small amounts of mucous or faeces leaking from the anus may be the primary cause. The fact that inconti-



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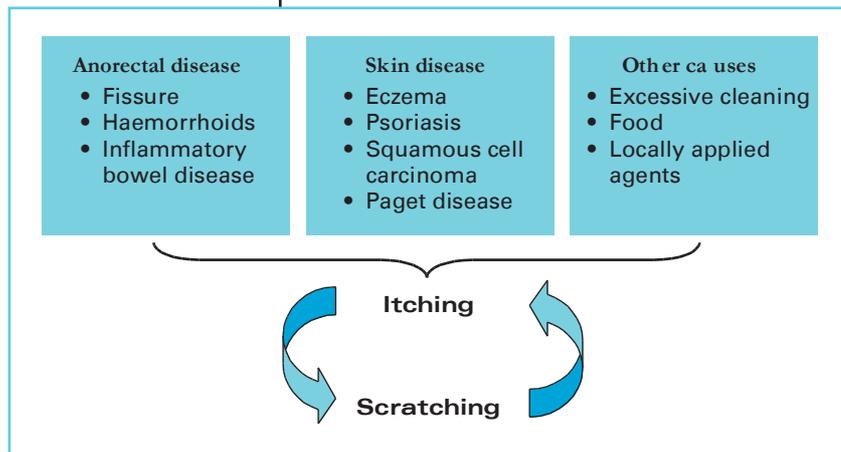


Figure 1. The development of perianal itch

Patients rarely complain of pruritus suggests this may not be sufficient.

There are some serious causes that need to be excluded – this is the time to get out the proctoscope! Carcinoma of the apocrine glands of the anus can result in Paget disease of the perianal skin – there will be ulceration and a fairly clear margin, although the appearance might be confused with general inflammation. The pruritus may be part of a more generalised problem such as lichen sclerosis. The white areas within the affected area will identify these cases. Other dermatological problems such as psoriasis or eczema may be present. A range of medications and local applications have also been implicated.

Whatever the initial cause, the problem may at times become chronic, with scratching inflaming the area and more itching resulting (Figure 1). Occasionally, a severe form of pruritus ani ensues with lichenification of the skin and an irresistible need to scratch.

In children, the itching may be a sign of intestinal helminth infection. In Australia, this is likely to be pinworms (*Enterobius vermicularis*) (Figure 2), however, in other countries other parasites should be considered. Sticky tape applied to the perianal skin and sent for microscopy will secure the diagnosis if in doubt (Figure 3).

## Treatment

There are three agents that are likely to be helpful:

- an emollient such as sorbolene
- hydrocortisone in the short term, and
- capsaicin.

Only capsaicin at 0.006% has been tested in a placebo controlled trial, providing complete relief in 30 out of 44 cases of intractable pruritus ani – a further four cases were helped as much by placebo.<sup>10</sup> Ongoing application



Figure 2. Adult female pinworms



Figure 3. Positive stickytape test for pinworm

– on average every day (range 0.5–7.0 days) – was required to remain symptom free.

## A practical approach

For less severe symptoms, it may be useful to avoid trauma by being very careful with the use of toilet paper – even applying sorbolene to the paper if necessary. Washing with sorbolene and applying as required will greatly assist, whether hygiene is a problem or not. For slightly more acute pruritus, hydrocortisone can be used for 1 week or so to speed relief if no steroid containing agents have been used previously. All other agents should be ceased to exclude contact sensitivity. A diet and symptom diary may be instigated if the problem continues, and for intractable cases capsaicin should be prescribed. Surgery to ‘tidy up’ the anus is not helpful.<sup>11</sup>

## Other options

Intradermal methylene blue injections have recently been reported as resolving over 90% of cases, but this treatment has not been tested in a controlled trial.<sup>12</sup> These have the apparent advantage of requiring a single treatment in most cases (80%). If problems persist a colorectal surgeon is probably the best bet based on the established literature.

## Conclusion

Perianal itch is a common, distressing symptom probably caused by local inflammation. Local anorectal disease, skin disease, excessive cleaning, local irritants – and in children – pinworm infection need to be considered as causative agents. Avoiding local irritants and application of emollient creams such as sorbolene is often effective. A short course of topical hydrocortisone cream or capsaicin cream may be required.

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