

Today's Treatment

Diseases of the Skin

The Management of Pruritus

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Diagnosis before Treatment

First we must get clear what the terms pruritus and prurigo mean. Pruritus, misspelt as often as eczema itself, means no more than itching. It is a symptom and not a disease in its own right, though some like to keep the word for those cases in which there is itching but no apparent skin disease as a cause. Thus it is as absurd to talk about the treatment of pruritus without specifying the cause as it is to advise on how to treat ulcers without saying if you mean the peptic or varicose sort. Diagnosis must come first and act as a basis for treatment; but this is the hard part—as few symptoms can have more causes than itching.¹

The first step is to decide whether the itching is due to a skin disease or not. Often this is not as easy as it sounds since scratching can, in its own right, give skin changes. Prurigo is the rather bad term, ill-defined, for the groups of scratched pink papules which are often seen on itchy skins, and which seem to be due to the scratching itself. Another pitfall is the way some skin diseases can hide even from the lenses of the skin doctor, all of whom must, at one time or another, have missed cases of scabies in the cleanly. Even harder to spot is the itching caused by parasites on pets; dog scabies, for instance, can make people itch but lacks the burrows which give away human scabies. Three other well known traps are worth thinking about: body lice may cause widespread itching but live in the clothing and may be missed if these are not looked at; clothing washed at the same time as fibre glass curtains can pick up fragments and lead to a whole family itching; and dermatitis herpetiformis (rare but worth getting right as it does well with either dapsone or a gluten-free diet) is so itchy that the tiny blisters which would give the game away are quickly broken, leaving a non-specific prurigo-like picture.

There is no room for more to be said here about the other skin diseases which are often itchy. Their diagnosis will rest on a good history and a full examination. The treatment will be that of the underlying conditions many of which are dealt with in other articles in this series.

Even if no skin cause can be found for itching, it cannot simply be pushed aside as neurotic, but needs to be looked into just as much as does a big liver or spleen. The table lists the main internal causes of itching. Diabetes mellitus is still in the list, but mainly from force of habit, as it now seems

Some Endogenous Causes of Pruritus

Diabetes mellitus
Drug sensitivity
Hyperthyroidism and hypothyroidism
Internal malignancy
Liver disease

Lymphoma
Onchocerciasis
Polycythaemia
Psychiatric disease
Uraemia

that itching other than the purely local sort, such as pruritus vulvae, is not really a feature of diabetes.

Since itching may start years before any other sign of internal disease can be found—for example, in Hodgkin's disease—it is only when all leads fail, and then with great caution, that the question of an emotional cause should be mooted.

Exactly the same sequence must be followed in cases of localized pruritus. Firstly, skin disease *per se* must be ruled out, then local factors—for example, the presence of piles. It is too easy to slap a psychiatric label on a patient with pruritus ani, perhaps missing a contact dermatitis from a local anaesthetic ointment.

Systemic Antipruritics

At last it seems settled that itching goes along the same neural paths as pain. The pattern of impulses rather than the route separates the two; but it does not follow that analgesics are much good for itching. Rarely aspirin helps a little, though it may (as a histamine releaser) make urticaria worse. Morphine may cause itching, again perhaps by histamine release.

Research with itch powder, made up of tiny prickles from the cowhage plant, has shown that it acts because the spikes contain a proteolytic enzyme which directly affects the free net-work of nerve endings, mainly at the dermo-epidermal junction, without releasing histamine. Many compounds other than histamine can cause itching—for example, trypsin, kallikrein, and perhaps bradykinin.² Prostaglandins, present in many types of skin inflammation, lower the threshold for itching evoked by histamine and possibly other agents.³ Apart from urticaria, histamine may not be playing a big part in most itchy dermatoses. Despite this, the antihistamines are the most widely used systemic antipruritics.

It is easier to say which drugs are used than to tell how well they work. Nothing is more subjective than itching, and clinical trials have to rely on the patient's own view of the drug's effect. If a drug seems to work, it may either be that it does cut down itching, or that a sedated patient does not worry about the itch so much. Trimeprazine and other phenothiazine antihistamines have a tranquillizing and sedative effect. When trimeprazine was compared with amylobarbitone⁴ no real difference was found, though the statistical

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methods may have been wrongly used.⁵ Many trials have boasted no statistics at all and their claims cannot be accepted. The difficulty in disentangling anti-itch from tranquilizing properties in clinical trials has led to a search for other ways of doing this, such as measuring changes in the length of itching caused by injections of trypsin. The study of scratching during sleep itself gets over many of the problems.⁶

Placebo Response

Uncontrolled trials took a bad knock from the crisp paper by Epstein,⁷ who compared the effects of four sorts of tablets on itchy patients. About two-thirds of his patients were helped by one or more of the tablets. All four were, in fact, placebos, so any benefit must be shown to be more than a placebo would give. In a double blind trial⁸ neither trimeprazine nor cyproheptadine, both widely used for itching, did any better than the placebo they were up against.

Another fallacy, in some trials of antihistamines, is the way the various itchy diseases, including urticaria, have been lumped together; urticaria may be expected to do well with antihistamines and the results must be falsely impressive.

Some general rules come out of these studies. The effect of systemic antipruritics may be relatively weak, and may not be specific. The sedative effect is often valuable, and may be helpful in ensuring a good night's sleep. There is little evidence that any one of the antihistamines, so often used, is very much better than the others. This being so, it is best to be familiar with the use of two or three well-established compounds, and to stick to these, rather than to be lured by the latest (and often most expensive) drugs available. Severe itching is a most unpleasant symptom. Sometimes, if no treatable cause can be found and other measures have failed, systemic steroids in moderate dosage may be helpful and justified, though obviously they must be used only with caution.

Local Measures

In the short term, mild scratching relieves itching. With more fierce and prolonged scratching, a vicious circle is set up in which scratching damages the skin cells, setting free chemicals—perhaps proteases—which add to the itch. It is not much use telling patients to stop scratching; if they could, they would have already; but ways of reducing the damage from scratching play a big part in the treatment of itching. For example, gloves may be worn at night, the nails should be cut short, and medicated bandages, or tapes such as flurandrenolone (Haelan) tape, can cover small itchy areas.

When the skin is already itchy, fierce attacks of itching may be triggered by non-specific stimuli; so it is always worth avoiding rough clothing, reducing exercise, stopping alcohol (which seems to aggravate itching by vasodilation), and avoiding extremes of environmental temperature.

Itching in the Elderly

Itching in the elderly, particularly in cold weather, is often related to dryness of the skin. This can be helped by cutting down the frequency of bathing, the use of a cleansing cream—such as aqueous cream (ung. emulsificans aquosum)—as a soap substitute, and applications of a bland emollient such as E45 cream or soft white paraffin.

Local antipruritics need as critical a look as the systemic ones. Tradition favours phenol (0.5–1%) in calamine lotion and menthol (0.25%) in calamine lotion or in a cream base such as ung. emulsificans aquosum. Their effects are difficult to assess though undoubtedly some are helped. Patients often admit to self-treatment: surgical spirit, which stings and cools, is a popular choice but should not be recommended. 10% crotamiton ointment (Eurax) is another widely used antipruritic with a built-in bonus, for the diagnostically insecure, of being active against the acarus of scabies.

Local anaesthetic and antihistamine ointments are mentioned only to be condemned, as their ability to cause contact allergy outweighs the way they can numb an itch. Even without obvious skin disease, if other simpler methods fail, topical steroids may be helpful and are widely used. The host of associated complications can usually be avoided by using the weakest preparation which will control the symptoms.

Specific Measures

If the underlying cause is known, its treatment may cure the associated itch. In onchocerciasis, for example, after a brief flare-up—reliable enough to be used as a diagnostic test—the itch subsides when diethylcarbamazine is used. The itching and urticarial lesions which may go with thyrotoxicosis will settle with antithyroid treatment.⁹ If an obstructive jaundice can be corrected surgically the accompanying itching will settle.

A cure is not always so simple, however—for example, the itching associated with chronic renal failure is not always reliably helped by dialysis, though parathyroidectomy has been reported to be helpful, the itch subsiding within a few days of the operation. In liver disease which cannot be improved surgically synthetic androgens may be some help, though they may actually deepen the jaundice. Cholestyramine, a basic anion exchange resin, binds bile salts in the intestine and may relieve the itching of partial biliary obstruction, but in the doses used (10–16 g daily) is unpleasant to take.

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