A chronic localised itch on the back

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What is the cause of this itch and how should it be treated?

Case history

A 67-year-old man presented complaining of a burning itching sensation on the same area of his back for the last 12 years. He reported that he was frequently scratching the area or rubbing it on doorjambs, which gave temporary relief. He had type 2 diabetes (controlled with diet) and hypertension (controlled with enalapril) but was otherwise well. No treatment had helped, and he was applying the high potency corticosteroid betamethasone dipropionate ointment, 'for something to do'.

On examination, there was a brownish, lichenified (thickened), palm-sized area on his lower back to the left of the midline (Figures 1 and 2). There were no rashes elsewhere. Sensory testing showed mild numbness in the area and no investigations were performed.

Diagnosis

The chronic history and localised nature of the itch is typical of notalgia paraesthetica. The visible changes are lichen simplex chronicus resulting from the repeated scratching and rubbing.

Differential diagnosis

Notalgia paraesthetica is a clear-cut clinical diagnosis and there are few tenable differential diagnoses. Other chronic pruritic dermatoses like dermatitis, psoriasis, lichen planus, prurigo or cutaneous T-cell lymphoma are very unlikely to be so localised for so long. The distribution does not suggest a contact allergy. Lichen simplex from habitual scratching may resemble it, and a common site for this is the nape of the neck.

Macular amyloidosis causing a light brown discolouration of the skin can be a feature of notalgia paraesthetica or other causes of itchy skin, and has been shown to be from degenerated keratin fibrils.

Comment

Notalgia paraesthetica is quite common in clinical practice although no formal epidemiology is available. Most often it is seen on the thoracic area near the lower medial border of the scapula. It is thought to be a localised sensory neuropathy, due to unspecified injury of primary dorsal nerve rami as they pass through paraspinal structures (it has been noted that the nerves here are more vulnerable to damage because they have a right angled course passing around the vertebral spinous process).[1] The condition can, however, occur at other sites along the spine, as seen with this patient, and sometimes occurs above the scapula. Patients usually describe itch with an uncomfortable quality; the severity varies but can be substantial. Skin biopsies of tan areas of notalgia paraesthetica show either lichenification with pigment from melanin in macrophages in the upper dermis or so-called macular amyloid (as in this patient).

Other localised sensory neuropathies (with various causes) include meralgia paraesthetica (lateral femoral cutaneous nerve), cheiralgia paraesthetica (superficial radial nerve), gonyalgia paraesthetica (infrapatellar branch of the saphenous nerve) and brachioradial pruritus. Like notalgia paraesthetica, brachioradial pruritus is not uncommon. It is characterised by itching around the lateral part of the elbow and proximal forearm that is often worse in the summer, and may be

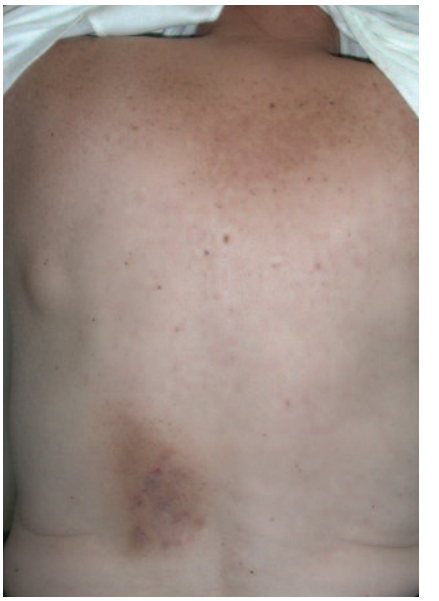

Figure 1. The site of the chronic itch – a brownish, lichenified area on the lower back.

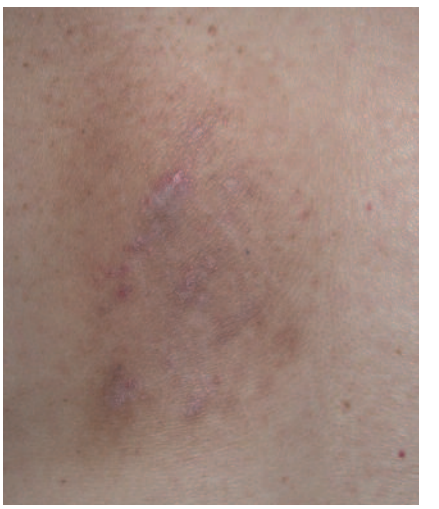

Figure 2. Close-up view of the itchy area, showing lichen simplex chronicus caused by repeated scratching and rubbing.

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due to compression of cervical nerve roots or local sun damage of the nerve .[2]

Treatment

Notalgia paraesthetica is difficult to treat. As expected, it often does not respond to topical corticosteroids, although it is worth trying a potent corticosteroid such as mometasone furoate (Elocon, Novasone) ointment twice daily for three weeks. (Mometasone furoate is less likely to cause atrophy than betamethasone dipropionate.) Musculoskeletal investigations such as thoracic spine x-rays or ultrasound rarely reveal a treatable cause but should be performed if indicated by other clinical features. If simple reassurance is not sufficient, the treatment options are:

- topical capsaicin cream – as this can cause significant burning start by applying the low strength (0.025%) cream (Zostrix) once daily, then twice daily if tolerated; if there is no therapeutic effect but also no irritation, the 0.075% 'HP' strength (Zostrix HP) may be tried.[3] Capsaicin is thought to work by depleting substance P (a mediator of pain and itch) from nerve endings
- local cooling creams – such as menthol 0.5% and phenol 0.5% in aqueous cream (available as an extemporaneous script on the PBS), applied as needed
- local anaesthetic creams (such as EMLA cream) – may give temporary relief but have the risk of causing contact allergy in some patients
- physiotherapy – may be effective and is worth trying
- acupuncture – has been reported to help a variety of localised neuropathies including notalgia paraesthetica[4]
- transcutaneous nerve stimulation
- oxcarbazepine (Trileptal) or amitriptyline – a study has reported that five patients with notalgia paraesthetica were helped by oxcarbazepine, 300 mg twice daily (the dose can be later increased as required);[5] amitriptyline 25 mg to a maximum of 75 mg at night is an alternative
- local anaesthetic blocks – for temporary relief. MT

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DECLARATION OF INTEREST: None.

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