



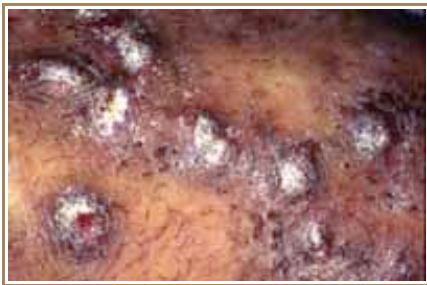
[Authoritative facts](#) about the skin from the [New Zealand Dermatological Society Incorporated](#).

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## Prurigo nodularis

Prurigo nodularis is characterised by very itchy firm lumps. It is not known why these appear and the condition is very difficult to treat effectively. It is also called 'nodular prurigo'.

### Prurigo nodularis



### Clinical features

Prurigo nodularis can occur at all ages but mainly in adults aged 20–60 years. Both sexes are equally affected.

The individual prurigo nodule is a firm lump, 1–3 cm in diameter, often with a raised warty surface. The early lesion may start as a smaller red itchy bump. Crusting and scaling may cover recently scratched lesions. Older lesions may be darker or paler than surrounding skin. The skin in between the nodules is often dry. The itch is often very intense, often for hours on end, leading to vigorous scratching and sometimes secondary infection.

The lesions are usually grouped and numerous but may vary in number from 2–200. They usually start on the lower arms and legs, and are worse on the outer aspects. The trunk, face and even palms can also be affected.

New nodules appear from time to time, but existing nodules may regress spontaneously to leave scars. Prurigo nodularis often runs a long course and can lead to significant stress and depression.

### What is the cause of prurigo nodularis?

The cause of nodular prurigo is unknown. It is uncertain whether scratching leads to the lumps, or if the lumps appear before they are scratched. The reason for the lumps, the inflammation and the increased activity and size of nerves in the skin is unknown.

Up to 80% of patients have a personal or family history of [atopic dermatitis](#), asthma or hay fever (compared to about 25% of the normal population).

Nodular prurigo may commence as an insect bite reaction or another form of [dermatitis](#). It has been associated with internal disease including [iron deficiency anaemia](#), chronic renal failure, gluten enteropathy, [HIV infection](#) and many other diverse conditions.

### Investigations

Sometimes, a [skin biopsy](#) is useful to confirm the diagnosis. Under the microscope, the skin is enormously thickened and may appear quite abnormal, sometimes resembling [squamous cell skin cancer](#). The nerve fibres

and nerve endings in the skin are markedly increased in size. The skin is inflamed and there is an increased number of substances known to cause itching and nerve growth.

Direct immunofluorescence looking for antibody deposition in the skin is usually negative. Rarely, the blistering disease [bullous pemphigoid](#) can present as nodular prurigo. In this case, immunofluorescence reveals immunoglobulins in the basement membrane zone below the epidermis. The prurigo nodules can be present for weeks or months before any blisters appear.

It is important to identify underlying diseases that are associated with nodular prurigo; blood tests may include full blood count, liver, kidney and thyroid function tests. [Patch testing](#) may be worthwhile if [contact allergy](#) is considered possible.

## Treatment

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Unfortunately this is one of the more resistant conditions skin specialists are called upon to treat. Local treatments tried include:

- [Emollients](#) applied liberally and frequently to cool and soothe itchy skin – menthol or phenol may be added.
- [Oral antihistamines](#) taken at night to reduce itch and allow sleep.
- Ultrapotent [topical steroid](#) creams, applied under occlusion (cover with a plastic dressing) to enhance their effect.
- Corticosteroid injections (triamcinolone acetonide 10 – 40 mg /ml) into thicker nodules.
- [Coal tar](#) ointment as steroid alternative.
- [Calcipotriol](#) ointment (topical vitamin D3) may be more effective than topical steroids in some cases.
- [Capsaicin cream](#), which induces itching and burning until eventually the itch stops completely – it requires repeated applications four to six times daily.
- [Cryotherapy](#), which may shrink the nodules and reduce their itch.
- Pulsed dye [laser](#), which may reduce the vascularity of individual lesions.

Antibiotic ointment may be used on individual infected lesions, and oral antibiotics (usually [flucloxacillin](#)) are indicated for significant secondary infection.

Systemic treatments that may be helpful for more severe disease include:

- [Phototherapy](#) ([UVB](#) and [PUVA](#))
- Anti-depressants such as [amitriptyline](#) or doxepin
- [Oral steroids](#)
- [Thalidomide](#), which is reserved for very severe cases. In New Zealand, prescription of thalidomide requires special application to the Ministry of Health and careful follow-up.
- [Ciclosporin](#), which may reduce the lumps and the itching but its use is limited by side effects. It is not registered for use in nodular prurigo in New Zealand.
- Systemic retinoids such as [acitretin](#), which may shrink the nodules and reduce the severity of the itch.
- Naltrexone, an opiate antagonist (this counteracts the narcotic effect of morphine, heroin and similar drugs), which has been reported to reduce itching in some subjects.

### Related information

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On DermNet NZ:

- [Dermatitis](#)
- [Lichen simplex](#)
- [Pruritus \(itch\)](#)
- [Actinic prurigo](#)

**Other websites:**

- [Prurigo nodularis](#) - emedicine dermatology, the online textbook

DermNet does not provide an on-line consultation service.

If you have any concerns with your skin or its treatment, see a [dermatologist](#) for advice.

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