



## Pruritic hyperpigmented patch on back

The location of the pruritic area on this patient's back and the darkened patch that followed helped us to identify the cause of her chronic discomfort.

A **60-YEAR-OLD WOMAN** visited our clinic complaining of an area on the right side of her middle back that was itchy, and had been bothering her for the past 10 years. She said her symptoms began without a trigger, and that a darkened area had appeared in the location of the itch. She had already been prescribed topical corticosteroids and antifungals and had tried over-the-counter aids, but nothing relieved the itch. The patient had a history of cervical radiculopathy and was morbidly obese at the time of the visit.

On examination, the pruritic area consisted of a hyperpigmented, non-infiltrated 7-cm patch that was lateral to the vertebral column and within the dermatomes T4 to T6 (**FIGURE**). The patient also had hyperesthesia to light touch in this region and scratch abrasions.

- WHAT IS YOUR DIAGNOSIS?
- HOW WOULD YOU TREAT THIS PATIENT?

### FIGURE

Itchy, darkened patch on the right side of the middle back



IMAGE COURTESY OF: JOANA SEQUEIRA, MD

**Joana Sequeira, MD; Diogo Pereira, MD; Cláudia Rainho, MD**

Centro de Saúde Arnaldo Sampaio, Leiria, Portugal (Dr. Sequeira); Unidade De Saúde Familiar Flôr de Sal, Aveiro, Portugal (Dr. Rainho); Unidade De Saúde Familiar Maria da Fonte, Póvoa de Lanhoso, Portugal (Dr. Pereira)

[joanaseq@gmail.com](mailto:joanaseq@gmail.com)

### DEPARTMENT EDITOR

**Richard P. Usatine, MD**  
University of Texas Health Science Center at San Antonio

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**Notalgia  
 paresthetica  
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 of an underlying  
 spinal condition.**

### Diagnosis: Notalgia paresthetica

The location of the pruritic area and the patient's clinical presentation led us to diagnose notalgia paresthetica. NP is a common dermatologic complaint characterized by unilateral pruritus that is medial or inferior to the scapula with dermatomal distribution.

The etiology of NP remains unknown, although it is thought to be a neuropathic itch caused by afferent nerve entrapment. The dorsal rami of the thoracic spinal nerves T2 to T6 are considered to be responsible for these symptoms. NP is not only a skin disease, but a cutaneous sign of an underlying spinal condition, including degenerative cervical spine disease.<sup>1-3</sup>

■ **NP is a clinical diagnosis.** There is typically a history of localized pruritus on the unilateral infrascapula area and there are few or no visible signs of disease. Patients frequently report a spider-bite sensation, prickly feelings, and/or an indescribable itch sensation. In addition, they may experience dysesthesia with diffuse mild burning, some surface numbness, and "under the skin" discomfort.

On physical examination, the patient may have a unilateral and ill-defined tan, pink, or hyperpigmented nonindurated patch on the infrascapular back that is a result of long-time scratching. Secondary skin changes such as lichenification, excoriations, eczema, xerosis, and infection often occur. Mild sensory alterations to light touch, vibration, and pin pricks may round out the clinical picture.<sup>1-3</sup> Atypical forms of NP include localized pruritus on the upper back, neck, scalp, or shoulder.

### Pruritus without other skin lesions can help pinpoint the Dx

The differential diagnosis for NP includes atopic dermatitis, contact dermatitis, drug eruptions, herpes zoster, idiopathic pruritus and systemic disease (such as renal, cholestatic, or hematologic pruritus, or pruritus associated with malignancy), tinea corporis, tinea versicolor, and xerosis.

■ **Clues in the history.** The chronic evolution of pruritus without other skin lesions, like vesicles or squamous areas, and the location of a hyperpigmented patch near the scapula region in a midlife patient, should prompt

you to consider NP. A biopsy may show signs of post-inflammatory infiltrate of the papillary dermis with dermal melanophages.<sup>4,5</sup>

Although imaging tests are not required for a diagnosis of NP, basic cervical and possibly thoracic radiographs or magnetic resonance imaging (MRI) may be helpful in patients with symptoms of spine pain, tenderness, spasms, decreased range of motion, or any history of spinal trauma or injury. The images may reveal spinal disorders, including osteoarthritic lesions such as kyphosis, kyphoscoliosis, and vertebral hyperostosis.<sup>4</sup>

The exact cause of NP is unclear, but the evidence suggests that it results from damage to the cutaneous branches of the posterior divisions of the spinal nerves. This can occur by either impingement from degenerative changes in the spine or by spasms in the paraspinal musculature.<sup>2</sup>

### The itch is neuropathic; antihistamines, steroids won't help

It is difficult to treat NP without treating the underlying disease, which is usually spinal damage.<sup>4</sup> Little has been published on the treatment of NP, and most of the literature on the subject involves case reports. Because the pruritus in NP is neuropathic, antihistamines and topical steroids are ineffective.<sup>4</sup>

The most commonly used treatment for NP among dermatologists is capsaicin as a 0.025% cream or 8% patch. One study with 20 patients reported improvement of pruritus in 70% of patients at 2 weeks, with some relapsing in about a month.<sup>6</sup>

Another treatment that has been used is cutaneous botulinum toxin type A injections, but its use is controversial. This strategy was proposed by Weinfeld<sup>7</sup> after successful treatment of 2 patients. However, other studies have had variable outcomes with no resolution of pruritus.<sup>8</sup>

Other treatments include gabapentin,<sup>9</sup> transcutaneous electrical nerve stimulation,<sup>10</sup> and narrow-band ultraviolet-B.<sup>11</sup> It is appropriate to consider surgical decompression or neurolysis of the nerve when other forms of treatment fail.<sup>12</sup>

■ **Our patient** was treated with topical capsaicin cream 0.25 mg/g, which lessened

the intensity of her itching. After 2 months, the patient reported improvement of her symptoms.

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#### CORRESPONDENCE

Joana Sequeira, MD, Estrada da Mata n°56, Leiria, Portugal; joanaseq@gmail.com.

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## Author

Anas Daghestani, MD

Director of Population Health

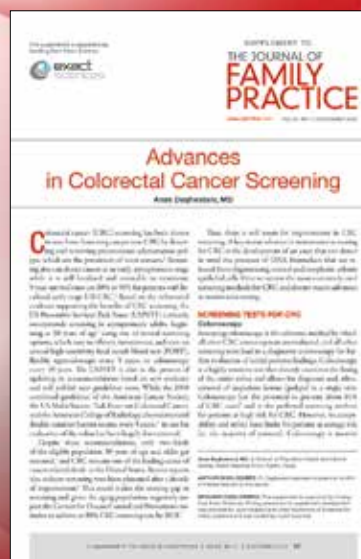
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