

Coexistence of Notalgia Paresthetica and Cervical Discopathy in a Young Girl

Zeliha Ünlü¹ , İlhan Celil Özbek¹ 

¹ Department of Physical Medicine and Rehabilitation, Celal Bayar University, Faculty of Medicine, Manisa, Türkiye

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Corresponding Author

İlhan Celil Özbek, MD

Address: Celal Bayar University, Faculty of Medicine, Department of Physical Medicine and Rehabilitation, Manisa.

E-mail: ilhanozbek7@gmail.com

Dear Editors,

The etiology of notalgia paresthetica (NP), which is generally accepted as a sensory neuropathy in which the posterior branches of T2-T6 spinal nerves are affected, causes itching and/or paresthesia symptoms limited to the scapular paravertebral region, and causes heterogeneous cutaneous pigmentation in the affected area, has not been fully determined. Many factors such as genetic predisposition, chemical neurotoxicity and spinal nerve damage due to chronic trauma, increased local skin innervation have been blamed in the etiology [1].

Although NP is reported to be a rare condition, it has been stated that it may not be rare in clinical practice due to diagnostic insufficiency [2]. In this context, the identification of NP cases will increase awareness. It will also enable clinicians to consider NP in diagnosis and differential diagnosis.

The aim of this paper is to discuss the coexistence between notalgia paresthetica and cervical discopathy in a young girl with a case report and to draw attention to the clinical importance of this rare condition in the young population.

Keywords: Notalgia Paresthetica, Cervical Radiculopathy, Chronic Pain

About Patient

A 21-year-old girl, who is a medical student at our university, applied with the complaint of pain radiating to the arm for 3-4 years in the neck and right upper-middle trapezius region. She stated that there was a local pruritic hyperpigmented lesion close to the midline in the upper part of the back on the right side, which is the dominant arm that started simultaneously with the pain. The case generally defined the severity of his complaints as approximately 7.5 out of 10 points according to the visual analog scale. Although the pain was not at a level to prevent activities of daily living, it increased with forward flexion of the neck and while studying [up to 9 severities]- it was relieved when taking a break.



She did not identify any factors, including trauma, for the etiology of NP or neck pain etiology in her medical history. The patient, who did not have a chronic disease, did not have a regular medication. There was no characteristic trait in her family history.

On physical examination, there were hyperpigmented lesion in the paraspinal region between the cervical 7-thoracic 4 vertebra levels on the right side and nail marks on the skin due to itching in the lesion area (Fig. 1). No limitation was detected in neck active/passive joint range of motion. Via palpation, spasm in the neck muscles and myofascial active trigger points were detected in the trapezius muscle, especially in the areas close to the lesion. During the Spurling test, she described sharp radicular pain radiating to the fingers along the right arm. The symptoms were relieved with the hyperabduction test. On neurological examination, muscle strength, deep tendon reflexes and superficial sensation were normal.



Figure 1. Hyperpigmented skin lesion in the paraspinal region between the cervical 7-thoracic 4 vertebra levels on the right side



Figure 2. Cervical MR imaging

Routine laboratory tests of the patient were within normal limits. No pathology was observed in the 2-way cervical radiography. Multiple central disc herniations were detected in MRI examination (Fig. 2).

The case was consulted to the dermatology clinic with a preliminary diagnosis of NP and the diagnosis was finalized. Burning-itching complaints of the patient who used topical capsaicin recommended by dermatology for 3 days increased, but pain complaints did not decrease. A physiotherapy program consisting of postural corrective exercises, stretching-strengthening exercises for cervical, scapular and pectoral muscles was initiated for the patient. A total of 15 sessions of conventional TENS treatment were applied to the neck and right arm [which will cover the entire complaint area] for 20 minutes, 5 days a week. At the end of the treatment, especially the complaint of pain regressed to a level of 3.5 according to the visual analog scale. Spurling test turned negative, myofascial trigger points partially resolved- relieved. There was no significant increase in complaints at the controls 1 month after the end of the treatment. Gabapentinoids and amitriptyline treatment were considered as secondary options. Since the patient was significantly relieved with TENS treatment, other treatments were not necessary. The patient was informed about the publication of case report and verbal consent was obtained.

DISCUSSION

The diagnosis of notalgia paresthetica is primarily made through a detailed medical history and physical examination. The clinical presentation of NP is often in the form of long-standing variable itching accompanied by a well-defined hyperpigmented macula located medial and lower 2/3rds of the scapula on the non-dominant hand side. In addition to itching, there may be complaints of pain, tingling, numbness. There is no primary cutaneous lesion in notalgia paresthetica. Secondary lesions such as hyperpigmentation and lichenification may be seen in patients with chronic pruritus. Deep excoriations are considered nearly pathognomonic for chronic pruritus of neuropathic origin [3, 4]. Our case had NP typical dermatological skin appearances. There are published a few case reports on the association of NP with cervical radiculopathy [3, 5]. Although the etiology has not been fully determined, have shown thoracic polyradiculopathy of the posterior branches of T2 to T6 as the primary cause. The most common causes of unilateral thoracic nerve compression are degenerative, osteoarthritic vertebral changes and herniated intravertebral discs [6]. Cervical radiculopathy accompanied

NP in our case. Clinical and radiological findings of cervical disc herniation were present. In addition, trigger points accompanying cervical disc hernias were detected in our case. Some studies have argued that muscle spasms cause symptoms and signs by compressing cutaneous and itch sensitive nerves [6].

Unlike NP that is typically observed in the elderly female population in the literature, our case was a 21-year-old young patient [6,7]. It is important to consider NP especially in cervical pain accompanied by radiculopathy in young patients. Inspection of the skin can confirm the presence of NP.

Regards,

REFERENCES

- [1] Perez-Perez LC (2011) General features and treatment of notalgia paresthetica. *Skinmed* 9:353-358; quiz 359
- [2] Shumway NK, Cole E, Fernandez KH (2016) Neurocutaneous disease: Neurocutaneous dysesthesias. *J Am Acad Dermatol* 74:215-228; quiz 229-230. <https://doi.org/10.1016/j.jaad.2015.04.059>
- [3] Alai NN, Skinner HB (2018) Concurrent notalgia paresthetica and brachioradial pruritus associated with cervical degenerative disc disease. *Cutis* 102:185;186;189;190
- [4] Mulkoglu C, Nacir B, Genc H (2018) An alternative in the treatment of notalgia paresthetica: neural therapy. *Int J Dermatol* 57:e70-e71. <https://doi.org/10.1111/ijd.14086>
- [5] Alai NN, Skinner HB, Nabili ST, Jeffes E, Shahrokni S, Saemi AM (2010) CUTIS Do Not Copy. *Cutis* 85:77-81
- [6] da Cruz CM, Antunes F (2018) Physical Medicine and Rehabilitation Role on Notalgia Paresthetica: Case Report and Treatment Review. *Am J Phys Med Rehabil* 97:929-932. <https://doi.org/10.1097/PHM.0000000000000946>
- [7] Situm M, Kolic M, Franceschi N, Pecina M (2018) Notalgia Paresthetica. *Acta Clin Croat* 57:721-725. <https://doi.org/10.20471/acc.2018.57.04.14>

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