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A minimal invasive treatment option in notalgia paresthetica: Dry needling

Dear Editor,

Notalgia paresthetica (NP) is a clinical entity characterized by localized pain, itching, hyperesthesia, paresthesia and hyperpigmentation usually located on the inferior scapular area. Although its etiopathogenesis is not fully known, two main possible pathophysiological mechanism has been proposed: Increased sensory innervation in the affected skin and neuropathy due to direct nerve compression or degenerative cervical disc disease. Topical treatments are often insufficient in relieving symptoms. In resistant cases, transcutanos nerve stimulation therapy and surgical options may be considered, depending on the underlying cause. Here, we present a recalcitrant case of NP successfully managed with dry needling, a less invasive method.¹

A 30-year-old male patient was referred from dermatology department to our clinic with the diagnosis of NP. The pyhsical examination revelaed a 10×15 cm hyperpigmented patch on the right infrascapular region. The patient also had concomitant pain, numbness and tingling. The complaints of the patient were still present after the topical cortycosteroid and antihistamine treatment prescribed by dermatologist. Active myofacial trigger points (MTrPs) were detected in the muscles of the cervical and thoracic paravertebral region. Three sessions of dry needling were administered to the active MTrPs in the cervical and thoracic paravertebral muscles of the patient with 1 week intervals. Dry needling had been applied until a local localization response was obtained as described by David Simons et al (Figure 1). Then, 0.3*30 mm acupuncture needles were used. Stretching and strengthening exercises for cervical and thoracic muscles were also recommended. The gabapentin treatment for neuropathic pain was started in 600 mg 2×1 posology and was proceeded with 3×1 use after 2 weeks. At the end of the first month, dolour neuropathic-4 scale score and 5-D itch scale score decreased significantly.

NP was first defined as a plaque characterized by itching, paresthesia or pain on the back.¹ There are definitions as increased localized sensory innervation in the affected skin area and neuropathy due to degenerative cervical, thoracic disc disease, or direct nerve entrapment.² In some studies, it has been reported that this compression is due to paraspinal muscle spasm and fascia tension.³ Medical treatment and physical therapy modalities can be used inthe treatment of NP. The common aim of these approaches is to eliminate the compression of the dorsal branch of spinal nerves. This has been targeted either in the form of directly decreasing the edema around nerve sheath or in the form of relaxation of the surrounding muscle tissue. Goulden et al⁴ performed T3-6 paravertebral nerve block and Richardson et al⁵ applied soft tissue techniques to cervical and upper thoracic area MTrPs in the form of muscle inhibition technique on patients diagnosed with NP. Subasi et al⁶ applied two sessions per week and a total of eight sessions of dry needling and kinesiobanding combination therapy to the MTrPs around the lesion of a patient with NP.

We assume that compression of spinal nerve can be reduced by stretching and strengthening exercises performed after the relaxation of spasm with DN. Although there is no consensus about how often the treatment of DN is applied, it should be kept in mind that our approach is less invasive, cost-effective and a modality that increases patient compliance. Along with medical treatment and exercise approaches, treating active MTrPs in the paravertebral muscles can enhance the treatment outcome. It is obvious that randomizedcontrolled studies are needed to reveal the efficacy and safety of this method in NP.



FIGURE 1 Application of dry needling to the cervical myofascial trigger points

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CONFLICT OF INTEREST

The authors declared no potential conflict of interest.

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REFERENCES

- Elmas ÖF, Kızılyel O, Metin MS, Atasoy M, Urlu SM, Tuncer K. Gözden kaçan bir antite: Notaljia parestetika [an overlooked clinical entity: notalgia paresthetica]. Agri. 2015;27:224-225.
- Alai NN, Skinner HB, Nabili ST, Jeffes E, Shahrokni S, Saemi AM. Notalgia paresthetic associated with cervical spinal stenosis and cervicothoracic disk disease at C4 through C7. *Cutis*. 2010;85:77-81.
- 3. Ellis C. Notalgia paresthetica: the unreachable itch. *Dermatol Pract Concept*. 2013;3(1):3.
- Goulden V, Toomey PJ, Highet AS. Successful treatment of notalgia paresthetica with a paravertebral local anesthetic block. J Am Acad Dermatol. 1998;38:114-116.
- 5. Richardson BS, Way BV, Speece AJ. Osteopathic manipulative treatment in the management of notalgia paresthetica. *J Am Osteopath Assoc.* 2009;109:605-608.
- Subasi V, Cakir T, Atasoy MF. Efficacy of dry needling and kinesiotaping combination in the treatment of notalgia paresthetica: a case report. *Turkish J Phys Med Rehab*. 2016;62:273-277.

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