

## Neuropathic hand pruritus

Sir,

Brachioradial pruritus (BRP) was originally described by Waisman in 1968.<sup>[1]</sup> He described the condition in Florida, USA and named it "brachioradial summer pruritus" and attributed the pruritus to sun exposure. In 1983, Heyl found X-ray changes of cervical spondylosis in some of his BRP patients and attributed the pruritus to lesions of the cervical spine or possibly a peripheral neuropathy.<sup>[2]</sup> In 1979 and 1997, the role of nerve root impingement in notalgia paresthetica was stressed.<sup>[3,4]</sup> In 2005, neuropathic form of scrotal pruritus was described.<sup>[5]</sup> I report an unusual presentation of neuropathic pruritus, localized to one hand and was secondary to cervical disc prolapse and hypertrophied ligamentum flavum.

A middle-aged man had been suffering from localized pruritus in the right hand, particularly the palm (C6 and C7 dermatomes) including the skin in-between the

middle and ring fingers, which had been mistakenly attributed to scabies by another dermatologist and given topical parasitocidal medication in vain. The localized pruritus used to come in bouts (not seasonal) and had significantly disturbed the patient over many months. The patient's past medical history was unremarkable. On examination, the skin was normal and there were no abnormal neurological signs. Alloknesis (Gk allos other, knēsis scratching) or itch produced by innocuous mechanical stimulation was absent. Adjacent dermatomes on the palm overlap considerably; however, the patient's localization of the itch suggested involvement of palmar C6 and C7 dermatomes. No specific diagnosis was made then. A skin biopsy was not performed and I suggested the use of emollient, oral non-sedating antihistamine and watchful waiting for any possible changes in the symptom. Few months later, the patient developed numbness of the right upper and lower limbs. It was clear then that neurosurgery consultation was urgently required. Magnetic resonance imaging (MRI) showed cervical disc prolapse (C5–6) and hypertrophied ligamentum flavum [Figure 1]. Cervical discectomy via anterior approach was performed on the case. Unfortunately, the operation was not that helpful and the patient developed bilateral upper and lower limbs pain few months later. A second operation was performed to decompress the spinal cord via posterior approach cutting the hypertrophied ligamentum flavum. All symptoms disappeared shortly thereafter.

Both pruritus and pain can lead to serious impairment of quality of life. They greatly affected my patient's quality of life and two operations were needed to eliminate the problem.



**Figure 1: MRI showing cervical disc prolapse (C5–6) and hypertrophied ligamentum flavum**

The classic features of BRP described by Waisman are pruritus confined to the upper brachioradial area with seasonal recurrences, intensification during the evening and absence of objective skin signs.<sup>[1]</sup> Neuropathic pruritus involving the whole upper limb due to cervical spinal cord compression has been described before;<sup>[6]</sup> however, to the best of my knowledge, this is the first time when pruritus confined to one hand (particularly involving the C6 and C7 palmar dermatomes) was linked to cervical spine disease. Thus my case was that of unusual presentation of neuropathic pruritus.

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