Editorial

Surgical intervention as a viable treatment option for brachioradial pruritus

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Comment on: Nguyen B, McGuire R, Taylor J. Resolution of brachioradial pruritus following anterior cervical discectomy and fusion: a case report. J Spine Surg 2023;9:195-200.

Keywords: Brachioradial pruritus (BRP); cervical radiculopathy; anterior cervical discectomy and fusion

Submitted Apr 23, 2023. Accepted for publication May 30, 2023. Published online Jun 20, 2023.

doi: 10.21037/jss-23-58

View this article at: https://dx.doi.org/10.21037/jss-23-58

Brachioradial pruritus (BRP) is a rare and chronic form of neuropathic itch that presents as itching of the proximal dorsolateral forearm. Symptoms may be intermittent, unilateral, or bilateral, and in some cases may extend to the upper arm, shoulder, neck, or upper trunk (1). While cervical nerve compression and ultraviolet radiation are possible causative factors (2), standard dermatological treatments are often ineffective. In severe and persistent cases, surgical intervention may be a viable treatment option (3).

There is evidence that various topical and systemic antipruritic therapies can be useful for the treatment of BRP, but further study is necessary to clarify efficacy. The typical approach involves using oral anticonvulsants such as gabapentin (4) or pregabalin (5) combined with a topical anesthetic, typically compounded ketamine, lidocaine, and amitriptyline (6). Topical capsaicin is another commonly used treatment (7). Surgical intervention is an option for patients with severe, intractable symptoms who fail to improve with other therapies (8). Cervical spine manipulation appeared beneficial in 10 out of 14 patients in one retrospective study (9).

In the case report by Nguyen *et al.* "*Resolution of brachioradial pruritus following anterior cervical discectomy and fusion: a case report*" (10), a 72-year-old female with a 2-year history of severe and persistent pruritus and mild pain in bilateral arms and forearms. MRI revealed disc herniation at C5–C6 causing mild cord compression with bilateral foraminal stenosis. She subsequently underwent anterior cervical discectomy and fusion at C5–C6. The surgery provided immediate symptom relief, but two months post-operation, her symptoms recurred due to cage migration. The patient then underwent implant removal and revision with the use of an anterior plate, leading to complete symptom resolution.

This case report highlights the potential of surgical intervention as a viable treatment option for specific patients with persistent BRP that have failed all other forms of conservative management. It also emphasizes the importance of including cervical radiculopathy in the differential diagnosis until ruled out by advanced imaging, particularly in cases of BRP that are associated with other neurological symptoms or are refractory to standard dermatological treatment (2). Rarely, BRP is associated with spinal tumors; in such cases, motor or neurologic deficits usually are present (11).

While surgical intervention is not appropriate for all cases of BRP, it should be considered as an option for patients who continue to experience symptoms despite other treatments. Clinicians should work together to evaluate the potential benefits and risks of surgical intervention for each patient on a case-by-case basis. Future research is needed to better understand the effectiveness and long-term outcomes

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of surgical intervention for BRP.

Acknowledgments

Funding: None.

Footnote

Provenance and Peer Review: This article was commissioned by the editorial office, *Journal of Spine Surgery*. The article did not undergo external peer review.

Conflicts of Interest: The author has completed the ICMJE uniform disclosure form (available at https://jss.amegroups.com/article/view/10.21037/jss-23-58/coif). The author has no conflicts of interest to declare.

Ethical Statement: The author is accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

Cite this article as: Cao T. Surgical intervention as a viable treatment option for brachioradial pruritus. J Spine Surg 2023;9(3):245-246. doi: 10.21037/jss-23-58

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