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Commentary on: “Postoperative Shingles Mimicking Recurrent Radiculopathy after Anterior Cervical Discectomy and Fusion”

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Neuropathic pain involving an upper extremity may be due to a variety of peripheral or central neuropathies such as cervical radiculopathy, carpal tunnel syndrome, diabetic polyneuropathy, postherpetic neuralgia, human immunodeficiency virus-related neuropathies, central post-stroke pain, multiple sclerosis, and spinal cord injury.

Montgomery et al present an interesting case of a patient with cervical radiculopathy and myelopathy that resolved after a two-level anterior cervical discectomy and fusion. However, the patient's radicular symptoms recurred 6 months later. A thorough workup and the eventual development of a herpetic rash demonstrated that this new pain was due to herpes zoster (shingles). Although not specifically mentioned, it is also important to note that patients with herpes zoster may present with signs of weakness in addition to radicular pain, as postherpetic neuralgia may develop into zoster-associated limb paresis that lasts several months.¹

Although the most common causes of neuropathic pain involving an arm are from cervical radiculopathy (estimated incidence: 83/100,000) and carpal tunnel syndrome (estimated incidence: 105 to 276/1000), the next most common causes are diabetic peripheral neuropathy (estimated incidence: 15/100,000) and postherpetic neuralgia (estimated incidence: 11 to 40/100,000).² As the authors present here, the presence of two different causes of radiculopathy in such a narrow time period is exceedingly rare. This report emphasizes the need to broaden the differential for recurrent arm pain, especially when patients have risk factors for herpes zoster, such as an advanced age, a weakened immune system, or increased physical stress.

In addition to clinical risk factors for herpes zoster, the clinical exam may also help differentiate between cervical

radiculopathy from herpes zoster or postherpetic neuralgia. Unfortunately, the specific type of pain was not described in this report. Patients with painful polyneuropathy or postherpetic neuralgia typically suffer from a burning pain and mechanical allodynia, whereas painful radiculopathy is usually described as lancinating or “electric-like” in nature. One theory is that the two types of pain are from different pain generators: radiculopathy is often due to a lesion proximal to the dorsal root ganglion, and postherpetic neuralgia affects the ganglion.³

Recurrent radiculopathy after cervical decompression is not uncommon, and Montgomery et al highlight the fact that a herpes zoster infection as well as other causes of cervical neuropathic pain should remain on the differential diagnosis. Appropriate additional imaging and studies should be performed to rule out cervical spinal stenosis, carpal tunnel syndrome, and polyneuropathies. In addition, a detailed and accurate physical examination may assist in determining the etiology.

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