Central Post-Stroke Pain Syndrome Masquerading as CRPS in an Acute Rehabilitation Hospital: A Case Report

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Introduction

A 42 year old female with Moya Moya disease suffered a right MCA stroke with resultant left hemiparesis. She developed refractory shoulder and arm pain not responsive to physical therapy or topical analgesics.

Case Description

The patient was unable to tolerate therapy in the acute inpatient rehabilitation setting due to severe left arm pain. On physical exam, she demonstrated substantial left arm allodynia, swelling, and erythema. She underwent stellate ganglion block for the presumed diagnosis of complex regional pain syndrome (CRPS) with no relief. She was then started on gabapentin with titration to 900mg three times daily, which adequately controlled her pain but she experienced sedation. It was titrated down to 900mg every night without increased pain. The patient was then able to actively participate in three hours of therapy daily.

Discussion

Central post-stroke pain syndrome is a neuropathic pain condition that occurs after a stroke commonly presenting as allodynia and dysesthesia of the affected limb. Patients may also have associated erythema and swelling, obscuring the diagnosis with CRPS. Peripheral neuropathic pain, spasticity, musculoskeletal pain syndromes should also be considered in this context. A variety of pain syndromes occur after stroke and clinicians must remain astute to accurately diagnose and treat post-stroke pain (Figure 1).

Conclusion

Post-stroke pain should be treated conservatively with topical and oral analgesia in the acute inpatient setting to improve pain and function in the affected limb. If conservative treatment fails, stellate ganglion block should then be considered to rule out CRPS.

References