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LETTER TO THE EDITOR

Painful trigeminal neuropathy in patients with invasive fungal sinusitis post COVID-19 infection

Dear Sir,

Since December 2019, the world is dealing with the novel coronavirus disease 2019 (COVID-19) pandemic, and now, nearly 20 months since, as the COVID-19 pandemic continues, we continue to learn about the new and long-term manifestations and complications of this disease. There has been a surge of invasive fungal co-infection in patients with COVID-19, many cases being reported worldwide.[1,2] One characteristic presentation in these patients is severe facial pain and numbness on the affected side, mostly involving V1 and V2 distribution of the trigeminal nerve, and often associated with a hemi-cranial headache. As per the International Classification of Headache Disorders (ICHD-3), this entity falls under the classification of "Painful trigeminal neuropathy attributed to other disorder."[3]

Neural damage can induce pain originating in a peripheral nerve, in a ganglion, in a dorsal root, or from the central nervous system. Trigeminal neuropathies are a group of clinical disorders that involve injury to the primary first order neurons within the trigeminal nerve.[4] The focus here is on pain resulting from injury to the peripheral branches of the trigeminal neuron, the injury caused by the rapidly progressive and destructive fungal infection.

The primary management of the disease includes urgent imaging followed by surgical debridement and early antifungal therapy, and that remains the most important intervention for reducing the pain.[5] These patients often require around the clock analgesia. Early use of standard antineuropathic medication is helpful in managing pain in these individuals. Injectable paracetamol and weaker opioids, like tramadol, play an important role in reducing the pain. The involvement of inflammation in a clinical painful neuropathy is a clear indication for anti-inflammatory therapy to minimize inflammation due to disease as well as due to surgery. However, simultaneous use of antifungal drugs, like Amphotericin B, have nephrotoxic potential and close monitoring of renal function tests may be necessary. Being an infectious pathology, steroids hold a limited role.

While we continue to deal with this deadly disease and invest all resources toward minimizing mortality, this is an attempt to address the need of efficient pain management in this subgroup of patients. Early diagnosis and treatment are essential, because once chronic pain is established the condition is hard to treat.

CONFLICTS OF INTEREST

There are no conflicts of interest to declare.

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