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LETTER:

anagement of pain has evolved significantly in the last decades. Not only neurosurgeons, but also various specialists, provide both invasive or noninvasive methods to control or relieve pain. It plays a significant role in the patients who do not respond to conservative methods of pain management.^{1,2} Pain management includes gabapentin, oxcarbamazepine, zonisamide, amitriptyline, nortriptyline capsaicin, and lidocaine patches.² There are many well-accepted procedures including diskectomy, microvascular decompression, deep brain stimulation, spinal cord stimulation, and direct drug administration into the central nervous system through different routes, such as cingulotomy, medial thalamotomy, stereotactic mesencephalotomy, cordotomy, cordotectomy, rhizotomy, commissural myelotomy, and so forth.3 The current coronavirus disease 2019 epidemic has changed our way to deliver neurosurgical care to patients. We also have been encouraged to contain the spread of infection; therefore, neurosurgeons must avoid every kind of close contact. Neurosurgeons need to anticipate that because the coronavirus disease 2019 pandemic continues growing, the increasing literature will also attempt to characterize the neurologic manifestations.^{4,5} Because many of the nonurgent neurosurgical procedures have been deferred during this pandemic, there is a need to develop guidelines for the management of painful syndromes (these conditions may not be life-threatening but can be quite disabling). Evidence suggesting the relative efficacy of several therapeutic alternatives might be pretty helpful for patients with disabling pain. These patients may get priority for one of these alternative treatments as reported in the literature.⁶⁻⁹ Additional noninvasive methods (radiosurgery, physiotherapy) of pain control can be further explored. There is enough available evidence; therefore, the scope can be extended with consensus.¹⁰

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Conflict of interest statement: The authors declare that the article content was composed in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

https://doi.org/10.1016/j.wneu.2020.06.225.

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REFERENCES

- 1. Foley KM. Cancer pain syndromes. J Pain Symptom Manage. 1987;2:S13-S17.
- Berliner E. Multisociety letter to the agency for healthcare research and quality: serious methodological flaws plague technology assessment on pain management injection therapies for low back pain. Pain Med. 2016;17:10-15.
- **3.** Baastrup C, Finnerup NB, Rice AS, Jensen TS, Yezierski RP. 'Inhibition of IL-6 signaling: a novel therapeutic approach to treating spinal cord injury pain' by Guptarak et al. Pain. 2014;155:197-198.
- 4. Abdelnour L, Eltahir Abdalla M, Babiker S. COVID 19 infection presenting as motor peripheral neuropathy. J Formos Med Assoc. 2020;119:1119-1120.
- Benny R, Khadilkar S. COVID 19: neuromuscular manifestations. Ann Indian Acad Neurol. 2020;23:40-42.
- Agosti E, Giorgianni A, Pradella R, Locatelli D. Coronavirus disease 2019 (COVID-19) outbreak: single-center experience in neurosurgical and neuroradiologic emergency network tailoring. World Neurosurg. 2020;138: 548-550.
- Kaur M, Gosal JS, Garg M, Bhaskar S, Jha DK, Bhatia P. Letter to the editor regarding "Intravenous acetaminophen (paracetamol) for post-craniotomy pain; systematic review and meta-analysis of randomized clinical trials". World Neurosurg. 2020;137:488.
- Rosenberg WS. Letter: a survey of chronic pain due to spinal dural arteriovenous fistulae. Neurosurgery. 2016;78:E161-E162.
- Ghaffarpasand F, Dadgostar E, Ilami G, et al. Intravenous acetaminophen (paracetamol) for postcraniotomy pain: systematic review and meta-analysis of randomized controlled trials. World Neurosurg. 2020;134:569-576.
- Sahu R. Non-drug non-invasive treatment in the management of low back pain. Ann Med Health Sci Res. 2014;4:780-785.