

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

LETTER TO THE EDITOR

In Reply to Letter to Editor Regarding "Economic Impact of COVID-19 on a High-Volume Academic Neurosurgical Practice"



LETTER:

We appreciate the interest of Dario et al. in their letter to the editor for our article, and we can certainly empathize with the unique challenges posed by patients with spinal cord stimulators. We also can understand the magnitude of challenges faced in Italy, as King County was one of the first epicenters of coronavirus disease 2019 (COVID-19) in the United States.

In our paradigm, we prioritized the replacement of implantable pulse generators ("functional" procedures) as urgent for deep brain stimulation, spinal cord stimulation, responsive neurostimulation, and vagal nerve stimulation during the pandemic. Furthermore, we also included intrathecal drugdelivery device replacement as urgent as well, with our reasoning being that halting a chronically effective treatment can be dangerous and even life-threatening and can result in the very outcomes that limiting operating room cases hopes to prevent (hospital visits or admissions for worsening Parkinson symptoms, increased seizures, medication withdrawal, intractable pain, etc.).

From a new implant standpoint, we agree that a delay between trial and implantation can cause significant problems. This can be infection as cited by the authors or also technical. All of our patients undergoing implantation of spinal cord stimulation leads during COVID-19 required laminectomy at additional levels to properly place a paddle electrode due to excessive scarring in the epidural space.

In general, we agree that the treatment of chronic pain has certainly been deprioritized during the pandemic. We as neurosurgeons must continue to advocate for the best interests of such patients, which includes prompt surgery during these challenging times.

Sananthan Sivakanthan, Andrew Ko, Rajiv Saigal

Department of Neurological Surgery, University of Washington, Seattle, Washington, USA To whom correspondence should be addressed: Sananthan Sivakanthan, M.D. [E-mail: ssiva@uw.edu]

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.2021.02.077.