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Letter to the Editor: Is COVID-19 the Cause of Delayed Surgical Treatment of Spine Trauma in Latin America?



LETTER:

We have been reading with great interest the growing information regarding the catastrophic 2019 novel coronavirus disease (COVID-19) pandemic. COVID-19, caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), has strongly affected almost every country across the globe, leading to >300,000 deaths. As such, Latin American countries such as Mexico, Brazil, Ecuador, Peru, Chile, and Argentina, among others, are deeply impacted. In many Latin American countries, the government has mandated total quarantine to minimize virus exposure in the population in an attempt to flatten the epidemiologic curve of the disease. Health care workers are split into work groups to improve working conditions and to try to guarantee coverage of any necessary medical disease. In addition, substantial undocumented infection is enormously facilitating transmission,¹ and Latin American countries have limited resources for screening all asymptomatic patients.

Before SARS-CoV-2 arrived in Latin America, the ideal timing for surgical treatment of spine trauma cases was highly influenced by local conditions with great heterogeneity, including differences in access to health care between public and private systems. In fact, this motivated the AO Spine Latin America Trauma Study Group to conduct an ongoing survey in this region to evaluate the delay in the treatment of spine trauma requiring surgery: "Surgical Delay in Thoracolumbar Fractures in Latin America. How Long Does It Take?" The impact of timing on surgical intervention in spine trauma cases has been demonstrated in previous studies for cervical² and thoracolumbar³ spine trauma. Notably, cases with incomplete deficit are generally more urgently treated compared with cases with complete spinal cord injury.⁴ The impact of early surgery on the outcome of complete cervical traumatic spinal cord injury was demonstrated: to promote neurologic recovery, surgical decompression of the spinal cord within 24 hours seems particularly beneficial.⁵

With regard to spine surgery during the COVID-19 pandemic, there are some recommendations to perform emergency or confined surgery for patients with severe nerve root compression, spinal cord injury, progressive aggravation of nerve dysfunction, or spinal fracture with obvious displacement or compression.⁶ However, many of these high-risk surgeries performed in high-risk patients require care in the intensive care unit, especially in cases in which a polytrauma needs to be properly managed. Many intensive care units are completely occupied or, when they are not, availability for patients who do not have COVID-19 is not considered a priority owing to the estimated projection of the virus spreading⁷ based on information obtained from outside of Latin America and influenced by the beginning of the disease in a specific country.

In addition, while working at any kind of hospital, spine surgery is not the biggest concern for administrators and is not a priority of the government during the time of a pandemic. However, spine surgeons need to offer the earliest and the best treatment possible

to these patients in the community. Patients with spine trauma are usually healthy, having unexpectedly sustained a significant injury of the spine, resulting in some cases in vertebral instability and/or new neurologic deficit, and in these patients social distancing is not possible. When these patients present with spine trauma, there is no knowledge regarding SARS-CoV-2 status, including in low-risk or asymptomatic patients, thereby impacting the final outcome if the patient treated has COVID-19,⁸ and sometimes the surgery is already performed, having the potential to spread the infection to health care workers.

A potential side effect of the COVID-19 pandemic for patients with spinal trauma is a delay in surgical treatment in patients with less severe injuries, who may develop late deformities or neurologic deterioration, owing to limited health care resources. In Latin America, even without a pandemic, limitations of resources already exist, such as adequate spinal implants, intensive care unit beds, operating room availability, and a good spine team. This reality is likely to become worse. Finally, a longer waiting list of patients with other spine pathologies for elective surgeries is expected, especially in the poorest locations.

We conclude that the unprecedented COVID-19 pandemic will deeply impact the care of the whole spectrum of spinal diseases, particularly trauma cases in locations with deficient structural resources and limited health care support. Therefore, spine surgeons in Latin America must try to anticipate these problems with hospital administrators in an attempt to minimize suffering of patients and improve outcomes in a scenario of adverse conditions.

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