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In Reply to the Letter to the Editor Regarding “COVID-19 Impact on Neurosurgical Practice: Lockdown Attitude and Experience of a European Academic Center”



We appreciate Goyal et al.'s interest and valuable questions regarding our recently published paper, “COVID-19 Impact on Neurosurgical Practice: Lockdown Attitude and Experience of a European Academic Center.” We noted and appreciated that the protocol and workflow for the management of neurosurgical patients that we applied at the early onset of the coronavirus disease 2019 (COVID-19) pandemic, at our institute, seems to be also effectively applied in larger and different countries such as India. As in Belgium and many other countries including the United States,¹ China,² or Italy,³ they implement in their current daily practice measures of social distancing, including the use of telemedicine and replacement of meetings and physical classes with videoconferences. They anticipate any potential health care congestion according to the national and institutional forecasts by suspending nonurgent elective surgeries and outpatient activities and redeploying wards, resources, and teams.

Based on published data as of October 18, 2020,⁴ and despite it being a smaller country with a population of 11,604,639, Belgium has reached a status of excess deaths per million, ranking third after Peru and San Marino (896 per million). In the same ranking, India is found in the 82nd position with 89 deaths per million. Similarly, in terms of the total number of COVID-19 cases per millions, Belgium counts cases 3.4 times greater than India (18,365 vs. 5453).

This greater ratio has not yet found an interpretation, and, if not attributed to different rates and methods of testing, diagnosing, and recording cases, shall be assessed through epidemiologic or even genetic studies in the future.

As mentioned in our report, during the lockdown period, the Belgian health ministry guidelines reserved COVID-19 testing only for patients with “suspected” COVID-19 requiring hospital admission. This policy was so conducted due to the limited—at that time—capacity of systematic testing at the early time of the pandemic, and a computed tomography scan of the chest scan was used instead to identify possible positive patients confirmed by reverse transcription polymerase chain reaction (RT-PCR) positive. Currently, and as applied in India,⁵ we also have adopted a policy of testing all patients admitted to the ward for any surgical intervention.

In response to the 2 questions posed by Goyal et al., as summarized in our Table 2, in our 20 COVID-19—positive patient series, 9 patients needed surgical intervention. Four of these 9 patients (3 oncological and 1 spinal) were postponed for a minimum of 7

days and were isolated in a COVID-19—dedicated ward. They did not undergo any surgical procedures before testing negative for COVID-19. The other 5 necessitated an immediate surgical procedure related either to acute trauma or vascular event and that could not be postponed. Of the total of 9 patients, 7 had a deadly outcome, including the 4 postponed patients who had tested negative before surgery.

Indeed, and as suggested by Goyal et al. in their comment and supported by the systematic review of Arevalo-Rodriguez et al.,⁶ the false-negative rate of RT-PCR testing ranged from 2% to 29% in the literature. And, as suggested by Venkataram et al.,⁵ a second consecutive negative test could be a solution in the future. What is more, possible long-lasting effects of the virus on basic physiological functions such as coagulation, even when the virus is absent, should not be neglected.

Finally, in response to the second question, of the 176 patients, 66 patients were considered as suspected and therefore underwent computed tomography scan of the chest and/or a throat swab RT-PCR testing at admission or during hospitalization; of these, only 20 were found positive.

Alphonse Lubansu and Salim El Hadwe

Department of Neurosurgery, Erasme Hospital, Université Libre de Bruxelles, Bruxelles, Belgium

To whom correspondence should be addressed: Alphonse Lubansu, M.D.

[E-mail: alphonse.lubansu@erasme.ulb.ac.be]

<https://doi.org/10.1016/j.wneu.2020.10.143>.

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