In Reply: COVID-19 Infection Affects Surgical Outcome of Chronic Subdural Hematoma

To the Editor:

We read with interest the letter “COVID-19 Infection Affects Surgical Outcome of Chronic Subdural Hematoma” by Panciani et al.¹ These authors reported high mortality in 5 patients with chronic subdural hematoma (CSDH) and COVID-19. On one hand, the viral infection provoked thrombocytopenia, thus increasing the risk of postoperative hemorrhages. On the other hand, the immune system could have been impaired by surgical procedures, thus facilitating the development of interstitial pneumonia (IP). Indeed, as the authors correctly stated, presently, there are no reliable data regarding the neurosurgical outcome of COVID-19 patients.

After the outbreak of the COVID-19 contagion in Lombardy, our department suspended elective surgery and became one of 3 regional hubs for neurosurgical emergencies. During the last month, we surgically managed 4 symptomatic patients with CSDH and COVID-19: 2 males and 2 females. Mean age was 75.5 yr. None presented preoperative respiratory symptoms. Of these patients, 2 were taking chronic antiplatelet drugs and 1 had a history of chronic liver failure. In all cases, the CSDH was monolateral. All patients were operated under local anesthesia and received postoperative prophylaxis by low-molecular-weight heparin before mobilization.

There was 1 case of severe postoperative IP: an 85-yr-old woman died 3 wk after surgery. Mild thrombocytopenia was found in 2 patients and was promptly corrected without any significant problem or postoperative rebleeding. Three patients fared well for what concerns both the CSDH and the evolution of COVID-19.

Of course, this series is too small to draw any conclusion. Undoubtedly, neurosurgical procedures may have the potential to worsen the course of COVID-19. However, IP occurred only in our oldest patient, and age is a well-known risk factor regardless of the surgical treatment. Except for this case, neurosurgical treatment and COVID-19 did not seem to influence each other significantly.

We suppose that a role could have been played by anesthesia: All our patients were managed under local anesthesia, whereas Panciani and colleagues¹ operated their patients under general anesthesia. In our experience, general anesthesia did not represent a problem in younger COVID-19 patients. Accordingly, the combined effect of age and anesthesia might be crucial.

A final brief comment is deserved by the reliability of nasopharyngeal swab in these patients. Two individuals underwent surgery with an already ascertained diagnosis of COVID-19 and early started antiretroviral therapy with lopinavir/ritonavir and hydroxychloroquine. Conversely, both the remaining 2 patients were studied by 2 repeated preoperative swabs, which always resulted negative. The diagnosis was ascertained postsurgery. Since one of these 2 patients was the elderly woman who developed lethal IP, perhaps this diagnostic delay could have been important.

Disclosures

The authors have no personal, financial, or institutional interest in any of the drugs, materials, or devices described in this article.

Giuseppe Talamonti, MD
Giuseppe D'Aliberti, MD
Marco Cenzato, MD
Department of Neurosurgery
ASST Niguarda
Milan, Italy

REFERENCE

1. Panciani PP, Saraceno G, Zanin L, Renisi G, Signorini L, Fontanella MM. Letter: COVID-19 infection affects surgical outcome of chronic subdural hematoma. *Neurosurgery*. published online: April 18, 2020 (doi:10.1093/neuros/nyaa140).

Copyright © 2020 by the Congress of Neurological Surgeons

10.1093/neuros/nyaa210