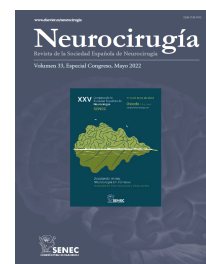




Neurocirugía (English edition)



<https://www.revistaneurocirugia.com>

O-122 - IMPACT OF COVID-19 IN MALIGNANT BRAIN TUMOR-IS THERE ANY CHANGE IN PATIENT CHARACTERISTICS BETWEEN PRECOVID-19 AND COVID-19 ERAS?

V. García Milán¹, J.M. Esteban García², C. Santos Jiménez¹, P. López Gómez¹, R. Martín Láz¹ and C. Velásquez¹

¹Hospital Universitario Marqués de Valdecilla, Santander, Spain. ²Quirón Zaragoza, Zaragoza, Spain.

Resumen

Introduction: The COVID-19 pandemic hindered access to healthcare resulting in a delay in diagnosis and treatment for the non-COVID-19 disease. Nevertheless, it remains unclear how the COVID-19 pandemic has impacted the diagnosis and treatment of malignant brain tumors.

Objectives: To compare a consecutive series of patients who underwent surgery for malignant brain tumors during the COVID-19 pandemic with a pre-pandemic historical control cohort in order to assess clinical features at diagnosis, tumor volumetrics, and the clinical outcome. Therefore, in this way, we analyze the pandemic impact on the diagnosis and treatment of malignant brain tumors.

Methods: A single-center retrospective cohort study was performed including patients who underwent surgery for malignant brain tumors in a Spanish tertiary center during and before the COVID-19 pandemic. Diagnosis delay, clinical presentation, tumor volumetrics, and surgical outcomes were compared between the two groups.

Results: A total of 110 consecutive patients harboring malignant brain tumors were included in the analysis, 53 and 57 patients in the COVID-19 era cohort and the control group, respectively. A delay in the diagnosis was observed in the COVID-19 era group when compared with the preCOVID-19 era cohort (14 days [IQR 3-30] vs. 8 days [IQR 2-15]; $p = 0.0378$). In addition, patients in the COVID-19 era cohort harbored a higher tumor volume than controls (median = 30.70 cm³ [IQR 9.39-46.85] vs. median = 15.00 cm³ [IQR 9.20-24.80]; $p = 0.0248$). Nevertheless, these differences did not result in worse clinical presentation or surgical outcome.

Conclusions: The COVID-19 pandemic resulted in a delay in the diagnosis of malignant brain tumor patients and it was associated with a larger tumor volume at presentation. However, these factors did not significantly impact the patient's clinical presentation, preoperative functional status, or surgical outcome.