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## OC-048 - THE GHOST TUMOUR REVISITED. CORTICOSTEROIDS IN PRIMARY CENTRAL NERVOUS SYSTEM LYMPHOMA: DIAGNOSTIC, PROGNOSTIC AND THERAPEUTIC IMPLICATIONS

A. Mosteiro, A. Ferrés, T.E. Topczewski, A. Rivero, I. Aldecoa, A. Rivas, G. Ailen, R. Morcos, J. Enseñat and J.J. González-Sánchez

Hospital Clínic de Barcelona, Barcelona, Spain.

### Resumen

**Objectives:** The cytolytic effect of corticosteroids on primary central nervous system lymphoma (PCNSL) has established the clinical dogma of avoiding steroid therapy prior to surgery for diagnostic purposes. However, since steroids are very useful during the initial management of intracranial lesions with vasogenic oedema, it was our aim to determine whether they actually cause a drawback in the diagnosis and prognosis of PCNSL.

**Methods:** A retrospective cohort study of patients diagnosed with PCNSL between 2000 and 2020 in our tertiary neurosurgical centre. Data on steroid administration, surgery type and complications, haematopathological findings and prognostic factors were compiled. A second cohort was used as a control group to compare the ratio of non-diagnostic biopsies; this series comprised patients who underwent stereotactic brain biopsy for any reason between 2019 and 2020.

**Results:** Forty patients with PCNSL were included in the study, of which 28 (70%) had received steroids before surgery. The use of steroids was more prevalent in patients with poorer performance status at diagnosis. No relevant differences were found in the diagnostic accuracy regardless of steroid exposure (93% under steroids vs. 100% without steroids) or type of surgery performed. Furthermore, steroid withdrawal did not seem to augment the diagnostic ratio. The notable diagnostic delay was not influenced by the use of steroids. In terms of overall survival, the total dose of steroids received was associated with worse prognosis.

**Conclusions:** Novel imaging and surgical techniques might obviate the need to withhold corticosteroids from patients suffering from PCNSL prior to biopsy. Moreover, when steroids have been given, tapering them and delaying the surgery might not be justified. This could hold relevant therapeutic implications in the early clinical stages. Finally, the stabilizing effect of steroids on the blood-brain barrier (BBB) does not seem to affect the treatment responses.