

## Neurocirugía



https://www.revistaneurocirugia.com

## O-PED-10 - CNS TUMOURS UNDER TWO YEARS OF AGE: A SINGLE INSTITUTION EXPERIENCE

<u>D.F. Amets Sagarribay</u><sup>1</sup>, L. Fonseca<sup>1</sup>, P. Branco<sup>1</sup>, G. Novais<sup>1</sup>, M. Correia<sup>1</sup>, M. Matos<sup>1</sup>, L. Matos<sup>2</sup>, M. Oliveira<sup>3</sup>, S. Nunes<sup>4</sup>, D. Salgado<sup>4</sup>, M. Mafr<sup>5</sup> and C. Conceição<sup>1</sup>

<sup>1</sup>Pediatric Neurosurgical Unit; <sup>2</sup>Pediatric Anesthesiology Department; <sup>3</sup>Intensive Care Unit, Hospital Dona Estefânia, Centro Hospitalar de Lisboa Central-EPE. <sup>4</sup>Pediatric Neuro-Oncology Unit, Instituto Português de Oncologia Francisco Gentil de Lisboa-EPE. <sup>5</sup>Pathology Unit, Hospital São José, Hospital Dona Estefânia, Centro Hospitalar de Lisboa Central-EPE.

## Resumen

**Objectives:** Central nervous system (CNS) tumours at the first two years of age are uncommon, representing approximately 10-18% of all childhood CNS tumours and, despite the advances in medical and surgical care, are still associated with a poor prognosis. The specific features of this population makes the treatment of this pathology a challenging issue, requiring an experienced multidisciplinary team in order to minimize risks and achieve the best results.

**Material and methods:** The authors review a surgical series of 23 cases of CNS tumours diagnosed under two years of age from January 2006 to January 2016 at Hospital Dona Estefânia (Lisbon, Portugal) and review the literature in Pubmed/MEDLINE database.

**Results:** Our series include 23 patients, with a slight predominance of male gender (13 males and 10 females) and a median age of 9 months. The majority of patients presented with intracranial hypertension signs and symptoms. Most of the tumours were located in the infra-tentorial compartment (65%). Preoperative embolization was used in one case. There was one case of intraoperative death. The most frequent histologic diagnosis were pilocytic astrocytoma (17%) and anaplastic ependymoma (17%), followed by pilomyxoid astrocytoma (13%). Median time of follow-up was 17 months. The authors report also data about blood loss, number of surgeries per patient, perioperative support, complications and surgical details.

**Conclusions:** CNS tumours at a very young age represent a challenging subset of tumors for neurosurgeons, anaesthesiologists, intensive care staff and neuro-oncologists. A multidisciplinary approach is needed to minimize morbidity and mortality.