Tumours in the pineal region in the paediatric age. Reports of 23 cases and a review of the literature.

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Abstract
INTRODUCTION: Tumours in the pineal region are located at a meeting point of several neurovascular structures that are difficult to reach surgically and for which the possibility of resection is limited; as a result the management of these lesions usually requires associated adjunctive treatment with radiotherapy and/or chemotherapy.

PATIENTS AND METHODS: This study is a retrospective analysis of the epidemiological, clinical, neuroimaging and pathological characteristics of 23 patients with tumours in the pineal region who were treated between the years 1997 and 2010 in the Hospital Infantil Niño Jesús. The factors involved in the prognosis of this cohort following surgical or adjunctive treatment are also discussed.

RESULTS: Subjects included in the study were 6 girls and 17 boys with ages ranging from 4 months to 18 years. It was found that the initial symptoms in 95% of the patients were signs of acute or subacute hydrocephalus, which required the placement of a ventriculoperitoneal shunt (82%). A histological sample of the tumour tissue was collected in all cases. Biopsy samples were taken in the case of five patients and 18 underwent surgery involving a craniotomy. Germinoma (eight cases) and mature teratoma (one case) were the tumours with the longest survival times; non-germinomatous tumours (three cases), those of the pineal parenchyma (four cases) and gliomas (five cases) presented the highest rates of recurrence and a poorer prognosis.

CONCLUSIONS: The study of tumour markers can be used to guide the diagnosis of certain tumours of the pineal region. At present, the recommended procedure involves taking a histological sample of the tumour in order to establish an accurate diagnosis and a specific oncological treatment.


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