



# Neurocirugía



<https://www.revistaneurocirugia.com>

## C0176 - MACROPROLACTINOMA WITH T CELL INFILTRATE: AN ANTITUMORAL IMMUNE RESPONSE OR A LYMPHOCYTIC HYPOPHYSITIS?

C. Barrena López, S.M. Cepeda Chafla, J.J. Ailagás de las Heras, I. Arrese Regañón y M.R. Sarabia Herrero

Hospital Universitario Rio Hortega, Valladolid, España.

### Resumen

**Objectives:** Inflammatory processes of the pituitary encompass a wide heterogeneous group of lesions, ranging from primary pituitary mononuclear infiltrate (or as part of systemic autoimmune disease), self-perpetuating reparative lesions, and secondary hypophysitis. Lymphocytic hypophysitis (LYH) is the most frequent primary chronic inflammatory condition, affecting more commonly in females during pregnancy or in the post-partum period. The clinical presentation varies but commonly are related with anterior pituitary dysfunction and sellar compression.

**Methods:** A 16-year-old male, with no medical history of interest, presented with acute vision loss of less than 24 hours and photophobia. Ophthalmologic check-up diagnosed amaurosis in the left eye and right upper visual field affected. Endocrinological exploration showed a Marañón's genito-adipose syndrome and an increased serum prolactin over 200 ng/ml. CT revealed a solid-cystic sellar lesion with supra and parasellar extension and wall calcifications; MRI with contrast showed isointense on T1WI, hyperintense on T2WI MR and wall enhance after gadolinium. Radiological presumption diagnosis was craniopharyngioma. The patient underwent preferential surgery through pterional approach to decompress optic nerve; we removed as much tumor as possible without new neurologic deficit. Histological examination showed a low-grade neuroendocrine entity with expression of synaptophysin and prolactin with multiple infiltrates of CD3+ T lymphocytes along intratumoral vascular septa. The pathological diagnosis was prolactinoma with LYH.

**Results:** Prolactin is a versatile immunomodulatory hormone, involved in the activation of the anti-tumor response in the early phase of inflammation associated with peripheral Th1 profile and also in the progression of the immune process in autoimmune diseases.

**Conclusions:** High levels of prolactin can be found both in patients with LYN and in those with pituitary adenoma. We think the lesion described is a cell-mediated host immune reaction and may reflect a transitory phenomenon directed at a subpopulation of tumor cells.