



"Nuestros niños, nuestros pacientes, nuestra razón de ser"

C046

## TITULO: ENDOSCOPIC TREATMENT OF ARACHNOID CYSTS: A RETROSPECTIVE ANALYSIS OF 34 PEDIATRIC CASES.

### Introduction and objectives:

Arachnoid Cysts (AC) affect 2.6% of the pediatric population. Surgery is indicated for symptomatic or expanding cysts. Endoscopic fenestration can be a treatment option to establish communication with cerebrospinal fluid (CSF) pathways. This study evaluates the efficacy and safety of purely endoscopic fenestration in pediatric AC.

### Methods:

We retrospectively analyzed 34 pediatric patients with non-ruptured ACs treated endoscopically between May 2007 and June 2025 at ULS Santa Maria. Clinical outcomes, recurrence, and complications were assessed.

### Results:

The cohort (23 males, 11 females) had a median age of 20,5 months (1 month - 18 years). Primary presentations included progressive macrocephaly (14/34, 41.2%), headache (7/34, 20.6%), and gait disturbances (6/34, 17.6%). Hydrocephalus was present in 8 cases (23.5%). Cysts were located supratentorial periventricular (12/34, 35,3%), temporobasal (11/34, 32,4%); infratentorial (8/34, 23,5%) and suprasellar (3/34, 8,8%).

Twenty patients presented with progressive cyst growth on serial imaging. Eighteen cystocisternostomies were performed, 14 cystoventriculostomies and 2 ventriculocystocisternostomies. Hydrocephalus resolved in all patients. Postoperative complications were found in 6 patients (17.6%) with no permanent deficits.

Twenty-five patients (73.5%) showed cyst reduction or stability and resolution of symptoms with a median radiological follow-up of 7,7 years. In 9 patients (26.5%) the procedure failed in average 13.2 months (1-38 months) after the initial surgery. Four patients were submitted to a new cyst fenestration, all with cyst reduction and resolution of clinical symptoms with a median radiological follow-up of 10,9 years. The overall success rate of the endoscopic procedure was 76,3% (29/38).



# SENEP 2026 Almería

41 REUNIÓN  
DE LA SOCIEDAD ESPAÑOLA DE  
NEUROCIRUGÍA  
PEDIÁTRICA

19 AL 21 DE FEBRERO DE 2026  
AUDITORIO MAESTRO PADILLA

**"Nuestros niños, nuestros pacientes, nuestra razón de ser"**

## **Conclusion:**

A purely endoscopic approach is a safe and effective method for the treatment of arachnoid cysts. Our findings demonstrate favorable clinical outcomes, even in cases where the initial surgical intervention failed.



**SECRETARÍA TÉCNICA: SOLUTIONS EVENTOS**  
Tels. 950 532 539 . 608 705 946  
Email: secretaria@senep2026.es | Web: senep2026.es

ORGANIZA

