

## Torticollis is a usual symptom in posterior fossa tumors

Verónica Cantarín Extremera · Javier Álvarez-Coca ·  
Gustavo Albi Rodríguez · Jorge Martínez Pérez ·  
José Luis Rubio de Villanueva · Carlos Pérez Díaz

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Brain tumors are the most common solid tumors in children, with approximately 54–70% localized in the posterior fossa [4].

The hospital medical records of patients presenting at the neurosurgical service of our hospital, over a period of 18 years (June 1988–June 2006), were reviewed. We found a total of 142 patients with PFT. The mean age at presentation was 5.2 years (range 5 months to 16 years).

Torticollis was present in 33 patients (23%), predominantly in children aged 2 to 8 years (22 out of 74) (Fig. 1). Torticollis was principally seen in gliomas (5 out of 6) and ependymomas (6 out of 19).

Tumors were mainly located at the cerebellum (57%), the fourth ventricle (17%), and the brainstem (13%). The

predominant histological type was astrocytoma (51%), followed by medulloblastoma (24%), ependymoma (13%) and glioma (4%).

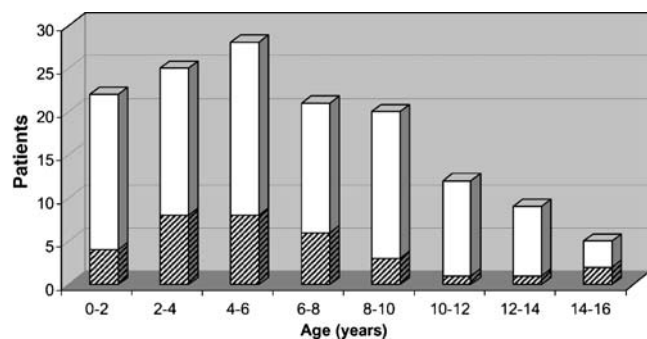
The clinical features were vomiting (60%), ataxia (51%), headache (48%), focal neurological signs (38%), behavioural changes (irritability, decay) (29%), torticollis (23%), diplopia (12%), nystagmus (11%), seizures (4%) and coma (4%).

Vomiting, ataxia and headache are the most common clinical symptoms reported at diagnosis of paediatric PFT in the literature [6]. We have also observed the same presentation features in our patients. The median time from symptom onset to diagnosis is more than 2 months [1, 3]. The appearance of focal neurological signs, diplopia, nystagmus or seizures alert a neurological etiology. However, acquired torticollis may not be ascribed to a PFT, especially when it is the only presenting symptom [2, 5].

V. C. Extremera (✉) · J. Álvarez-Coca · J. M. Pérez ·  
J. L. R. de Villanueva  
Department of Pediatrics, Hospital Infantil Niño Jesús,  
Avenida Menéndez Pelayo 65,  
28009 Madrid, Spain  
e-mail: verocantarín@hotmail.com

G. A. Rodríguez  
Department of Radiology, Hospital Infantil Niño Jesús,  
Madrid, Spain

C. P. Díaz  
Department of Paediatric Neurosurgery,  
Hospital Infantil Niño Jesús,  
Madrid, Spain



**Fig. 1** Number of patients with posterior fossa tumors (full column) and patients with torticollis (shaded portion of column) in every age range

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