

BEHAVIORAL AND COGNITIVE DISTURBANCES IN CHILDREN WITH POSTERIOR FOSSA TUMORS POST-SURGERY: A DESCRIPTIVE LONGITUDINAL ANALYSIS

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Background and Aims

Background: Posterior fossa tumors (PFTs) in children are associated with motor, cognitive, and behavioral challenges that may hinder social reintegration and quality of life post-surgery. Aim: This study investigates the incidence and characteristics of behavioral disturbances in children following surgical treatment for PFTs, focusing on psychosocial and cognitive impacts.

Methods

Methods: Epidemiological analysis was conducted using data (2013–2024) from the Early Intervention and Rehabilitation Unit at "P. & A. Kyriakou" Children's Hospital. Children with histologically confirmed PFTs were included. Data collected covered demographics, anxiety, behavioral and sleep disorders, suicidal ideation, and cognitive deficits.

Results

Results: Among 183 patients (mean diagnosis age: 5.8 years; male-to-female ratio: 1.5:1), attention and memory deficits were reported in 84%, persisting in 61% despite cognitive improvements. Children ≤6 years showed high rates of parental attachment (64%) and behavioral control needs (73%). In older children, 77% had limited socialization, and ≥9-year-olds reported anxiety (84%) and fear of relapse (91%). Sleep disorders were prominent early (91%), decreasing to 12% after one year. Psychological support was regular in 68% of cases.

Conclusion

Conclusion: Early identification and intervention for behavioral and cognitive issues in children with PFTs are critical to promoting recovery, autonomy, and successful community reintegration.

Keywords: brain tumour, children, cognition, behaviour