Does choroid plexus tumour differ with age?

Authors: S. Sampath a; Garg Nitin a; T. C. Yasha b; B. A. Chandramouli a; B. Indira Devi a; J. M. E. Kovoor c

Affiliations: a Department of Neurosurgery, Neuropathology, c Neuroradiology, National Institute of Mental Health and Neurosciences, Bangalore, India

DOI: 10.1080/02688690801942072

Publication Frequency: 6 issues per year

Published in: British Journal of Neurosurgery, Volume 22, Issue 3 June 2008, pages 373 - 388

Subject: Neurosurgery;

Formats available: HTML (English) : PDF (English)

Abstract

Choroid plexus neoplasms are rare intracranial neoplasms. Significant differences exist in their presentation and management in paediatric and adult populations. The present study aims to study the differences among the paediatric and adult population, various factors affecting the outcome, and the clinical and histological correlation. This is a retrospective study of 47 patients with choroid plexus neoplasms managed at NIMHANS from 1984 to 2004. The case records and images were retrieved and reviewed. The various histopathological features were outlined and histopathology reviewed accordingly. For follow-up, patients were contacted by letter or telephone and the necessary information obtained. Follow-up was available in 41 out of 47 patients. Sixty per cent patients were in the paediatric age group and 40% were adults. Forty-three per cent of children with tumours were less than 1 year of age. The lateral ventricle was the most common site of involvement in the paediatric group compared with the fourth ventricle in adults. Calcification is seen on CT scan more often in papillomas and in adult tumours. Invasion of surrounding parenchyma may be seen in both papillomas and carcinomas. However, in papillomas it is by nests of tumour cells compared with carcinomas wherein invasion is by individual tumour cells. Hydrocephalus is present irrespective of location and size of the tumour. Gross total excision is more feasible in adults. Large tumour size, excessive blood loss, higher incidence of carcinomas result in partial excision of these tumours in the paediatric group. Subdural collections and tumour bed haematomas are more common complications in the paediatric group after resection of tumour. These tumours have significant differences among paediatric and adult groups. Carcinomas are predominantly seen in younger children. Invasion of brain
parenchyma by nests of cells does not carry a poor prognosis. The outcomes are better in adults.

**Keywords:** Choroid plexus neoplasms; hydrocephalus; intraventricular neoplasms; magnetic resonance imaging