Tanycytic ependymoma

- Synchronous presentation of prolactinoma and supratentorial tanycytic ependymoma
- A Huge Calcified Supratentorial Ependymoma: A Case Report
- Stretched intradural extramedullary tanycytic ependymoma of the thoracic spine
- Lipomatous ependymomas of the posterior fossa. An infrequent and little-known subtype. A case report and review of the literature
- Whorling Sclerosing Ependymoma of the Cervical Spinal Cord Presenting Tanycytic Histopathologic Features: A Rare Case Report
- Two cases of spinal tanycytic ependymomas occurring in brothers with a neurofibromatosis type 2 gene mutation
- Comprehensive profiling of myxopapillary ependymomas identifies a distinct molecular subtype with relapsing disease
- Tanycytic ependymoma: highlighting challenges in radio-pathological diagnosis

Tanycytic ependymoma is a histologically distinct rare subtype of ependymoma and is recognized as a Grade II tumor in the latest World Health Organization classification in 2021, typically arising from the cervical or thoracic spinal cord.

In 2018 Fifty-one studies involving a total of 77 patients were identified and included. Most cases of tcEs occurred in the spinal cord (50.6%), followed by lesions located in upper intracranial sites (36.4%) and only a few at the cervicomedullary junction (3.9%). The female-to-male ratio was calculated as about 1:1.5, with a mean age at diagnosis of approximately 36.1±18 years. Complete resection of the tumor without further additional therapy was the treatment of choice in most cases (63.6%), and radiotherapy was considered in 10 cases (13.0%). In 18 reported cases of tcE (23.4%), the treatment was not documented. Defined follow-up periods for patients with tcE were only documented in 44 cases (57.1%), the mean follow-up was 22.3 months. 36 cases (46.8%) had no recurrence of tumor after treatment (26 months mean follow-up).

This comprehensive review on tcEs supports surgery as the initial treatment modality of choice. Radiotherapy can be considered when total gross resection cannot be achieved and allows for prolonged progression-free survival. Given the benign nature of this subtype of ependymoma, aggressive treatment such as chemotherapy is usually not indicated [1)].

On reviewing 43 ependymomas and 71 astrocytomas 11 neoplasms were found having a tissue structure reminiscent of the evolution of piloid astrocytes from ependymoglia or tanycytes, respectively. These features correspond to transitional stages seen in normal primitive brains. Tumors of this type may be characterized as a tanycytic variant of ependymomas. They appear to be relatively common in the spinal cord and present a source of confusion with piloid astrocytomas [2)].

Classification

see Spinal tanycytic ependymoma.

see Intracranial tanycytic ependymoma.

1)
Kasper EM, Ippen FM, Maragkos GA, Anderson MP, Rojas R, Mahadevan A. Tanycytic ependymoma of the brain stem, presentations of rare cystic disease variants and review of literature. J Neurosurg Sci. 2018 Feb;62(1):78-88. doi: 10.23736/S0390-5616.17.04194-7. Epub 2017 Sep 7. PMID: 28884561.
2)
Friede RL, Pollak A. The cytogenetic basis for classifying ependymomas. J Neuropathol Exp Neurol. 1978 Mar-Apr;37(2):103-18. PubMed PMID: 632843.