Spinal Tanycytic Ependymoma

Spinal tanycytic ependymoma is a rare variant of ependymoma that commonly affects the cervical and thoracic spinal cord. It usually arises as intramedullary lesions and extramedullary cases are extremely rare.

Although the literature deals extensively with pathological features of this tumour entity, imaging features have not been well characterized. The purpose of as study was to review magnetic resonance imaging (MRI) features of spinal tanycytic ependymomas reported in the literature to date, exemplified by a case of a patient with tanycytic ependymoma of the conus medullaris presenting to our hospital.A Medline search of the English literature for all previously published cases of spinal tanycytic ependymoma was carried out and the reported MRI features reviewed. The tumours were found to be typically well-demarcated masses, predominantly showing isointensity on T1-weighted signal, and T2-weighted hyperintensity, with variable patterns of contrast enhancement. A cystic component was seen in half of the cases, and in a minority a mural nodule was present within the cyst wall. Associated syrinx formation was observed in one-third of the cases and haemorrhage was rare, which may be helpful pointers in differentiating the lesion from other ependymoma subtypes.In conclusion, MRI characteristics of spinal tanycytic ependymoma are variable and non-specific, and radiological diagnosis thus remains challenging, although certain predominant features are identified in this report. Knowledge of these is important in the diagnostic differentiation from other intramedullary and extramedullary spinal tumours in order to guide appropriate surgical management [1].

Case reports

A 77-year-old woman with the complaints of a 2-year history of progressive paraparesis and sensory loss in her lower extremities. Magnetic resonance imaging revealed a stretched and fusiform intradural extramedullary lesion at T5-T10 level. Gross total removal of the tumor was achieved and a definitive diagnosis of tanycytic ependymoma was established.

This case thus represents a rare case of thoracic intradural extramedullary tanycytic ependymoma and, to the best of our knowledge, it represents the longest intradural extramedullary tanycytic ependymoma in craniocaudal direction ever reported in the literature [2]

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Tomek M, Jayajothi A, Brandner S, Jaunmuktane Z, Lee CH, Davagnanam I. Imaging features of spinal tanycytic ependymoma. Neuroradiol J. 2016 Jan 11. pii: 1971400915621322. [Epub ahead of print] Review. PubMed PMID: 26755489.
2)
Montemurro N, Lorenzini D, Ortenzi V, Giorgetti J. Stretched intradural extramedullary tanycytic ependymoma of the thoracic spine. Surg Neurol Int. 2022 Sep 16;13:426. doi: 10.25259/SNI_647_2022. PMID: 36324966; PMCID: PMC9610279.