Dysembryoplastic neuroepithelial tumor case reports

Dysembryoplastic neuroepithelial tumor recurrence of unusual dysembryoplastic neuroepithelial tumour with novel molecular features presenting 10 years after gross total resection. BMJ Case Rep. 2021 Jul 8;14(7):e244166. doi: 10.1136/bcr-2021-244166. PMID: 34244202 [1].

2016

A 8-year-old boy who presented with an incidental finding of a small right insular lesion which grew slowly over 3 years. The patient first underwent surgery with subtotal tumor resection at age 11. Pathology was consistent with DNET. Following surgery, further tumor growth was evident, requiring fractionated radiotherapy and eventually chemotherapy, but continued tumor growth was witnessed. Three years after radiation, imaging showed dramatic further tumor growth, and the patient underwent a second debulking surgery. The pathology revealed a malignant tumor with BAF47-negative cells, suggestive of AT/RT. This report adds about the poorly understood behavior and natural history of DNETs and emphasizes the importance of lifelong clinical and neuroimaging follow-up of these lesions [2].

2015

A pediatric patient with intractable epilepsy caused by a simple DNT located in the precentral gyrus. Intracranial electrodes were implanted and used in combination with magnetic resonance imaging, video-electroencephalography and electrical cortical stimulation to assess neurological function, and where the epileptogenic zone was located.

The results of intracranial electrode monitoring suggested that the epileptogenic zone was located in the tumor area and that cortical function had been reorganized. We completely resected the tumor based on these findings. The patient has been seizure free after the surgery and has not had any neurological deficits.

Simple form DNTs in the precentral gyrus can be completely resected with careful preoperative assessment of cortical function. Cortical reorganization could partly explain the functional preservation after surgery [3].

1992

Prayson and Estes describe two cases of dysembryoplastic neuroepithelial tumor occurring in young patients (ages 8 and 19 years). Both tumors were located in the temporal lobe. Temporal lobectomy with excision of mesial structures resulted in resolution of the seizures. Differential diagnosis includes oligodendrogliomas, mixed gliomas, and gangliogliomas. Features of the dysembryoplastic neuroepithelial tumor that are useful in making the distinction include a multinodular and multicystic appearance, the presence of both neuronal and glial (oligodendrocytic and astrocytic) components with little if any cytologic atypia, the presence of accompanying cortical dysplasia, and the lack of an

arcuate vascular pattern. Because dysembryoplastic neuroepithelial tumors are curable by excision, the recognition and correct diagnosis of this tumor is important [4].

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Jell C, Malicki D, Levy M, Crawford JR. Recurrence of unusual dysembryoplastic neuroepithelial tumour with novel molecular features presenting 10 years after gross total resection. BMJ Case Rep. 2021 Jul 8;14(7):e244166. doi: 10.1136/bcr-2021-244166. PMID: 34244202.
2)
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3)
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4)
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