Dysembryoplastic neuroepithelial tumor recurrence

Recurrence/continued growth: recurrence after complete removal or tumor growth after partial resection is rare. Adjuvant treatment (XRT, chemotherapy…) is of no benefit in these benign tumors.

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].

A case of long-term recurrence of a DNET, which initially resected and diagnosed as an oligodendroglioma prior to the recognition of DNETs. This patient was seizure-free for 12 years and had no signs of radiologic progression until 24 years after initial resection. On repeat surgical resection, 31 years after the initial surgery, histopathologic evaluation identified the characteristic features of DNET in both specimens.

This patient's 24-year disease-free interval prior to radiologic recurrence demonstrates the longest interval to relapse in the literature for a DNET. This case illustrates the possibility of late recurrence of DNETs decades after radiographical complete resection to emphasize the necessity of thoughtful clinical judgment in adult survivors of low grade pediatric neoplasms who present with seizures after a prolonged seizure-free interval [2].

A 15-year-old female with a temporal lobe DNT, which recurred and transformed into an astrocytoma (WHO grade II) five years after an initial gross total resection (GTR). Furthermore, all the previous studies on recurrent DNT were reviewed. Although the majority of DNT cases demonstrate benign behavior, recurrent DNTs have been observed following a GTR of the tumor. Patients do not appear to benefit from post-operative adjuvant therapy, and inappropriate radiotherapy or chemotherapy may result in tumor recurrence or malignant transformation. The prognosis is favorable if a GTR of the recurrent tumor is achieved. The use of regular imaging examinations and the maintenance of a long-term follow-up is of importance following a tumor resection [3]

A patient who underwent resection of a histologically proven DNT at 6 years of age. The resection was thought to be total at the time of surgery, and this impression was confirmed on postoperative imaging. Following the initial resection, the patient underwent surveillance imaging at regular intervals. Six years following the initial surgery, surveillance imaging demonstrated an enlarging area of signal abnormality at the site of the prior resection. The patient underwent a second resection with pathological confirmation of DNT recurrence. Although recurrence of DNT following resection is rare, this case suggests that surveillance imaging may have a role in patients with DNT, even following resections that are thought to be complete [4].

1)
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