Gliofibroma

Gliofibromas are rare biphasic tumours with a good prognosis that usually occur in childhood. Rare adult spinal cases have been treated with radiotherapy. This report describes the case of a gliofibroma occurring in a young adult 10 years after treatment for a childhood pilocytic astrocytoma.

A 14-year-old female underwent complete resection of a right lateral ventricle pilocytic astrocytoma confirmed on postoperative magnetic resonance imaging (MRI). At the age of 17, the tumour recurred, and a second complete resection was performed. Due to the early recurrence, she was placed on long-term MRI surveillance. At the age of 23, an enhancing left midbrain tumour was identified that was suspected to be a recurrent pilocytic astrocytoma. Following surgical resection the histopathology revealed a gliofibroma. Due to the growth of further tumour nodules she was treated with fractionated radiotherapy. There is no disease recurrence after 36 months of follow-up, and the patient remains well.

Gliofibromas are tumours which usually occur in childhood; this case report identifies a rare occurrence in an adult. The childhood intraventricular pilocytic astrocytoma was in an anatomically distinct location to the midbrain gliofibroma. Radiotherapy can control these tumours, and follow-up is required to understand the long-term outcome and prognosis [1)].

1)
Ahmad MU, Barborie A, Pizer B, Husband D, Mallucci C, Jenkinson MD. Midbrain Gliofibroma Presenting in Adulthood following “Cure” of a Childhood Intraventricular Pilocytic Astrocytoma. Pediatr Neurosurg. 2017;52(3):151-154. doi: 10.1159/000455920. Epub 2017 Mar 1. PubMed PMID: 28245445.