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## Pediatric-Like Brain Tumors in Adults

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### Abstract

Pediatric brain tumors are different to those found in adults in pathological type, anatomical site, molecular signature, and probable tumor drivers. Although these tumors usually occur in childhood, they also rarely present in adult patients, either as a de novo diagnosis or as a delayed recurrence of a pediatric tumor in the setting of a patient that has transitioned into adult services. Due to the rarity of pediatric-like tumors in adults, the literature on these tumor types in adults is often limited to small case series, and treatment decisions are often based on the management plans taken from pediatric studies. However, the biology of these tumors is often different from the same tumors found in children. Likewise, adult patients are often unable to tolerate the side effects of the aggressive treatments used in children-for which there is little or no evidence of efficacy in adults. In this chapter, we review the literature and summarize the clinical, pathological, molecular profile, and response to treatment for the following pediatric tumor types-medulloblastoma, ependymoma, craniopharyngioma, pilocytic astrocytoma, subependymal giant cell astrocytoma, germ cell tumors, choroid plexus tumors, midline glioma, and pleomorphic xanthoastrocytoma-with emphasis on the differences to the adult population.

**Keywords:** Choroid plexus tumor; Craniopharyngioma; Ependymoma; Germ cell tumor; Medulloblastoma; Pediatric brain tumors; Pilocytic astrocytoma.

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