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*Case Report*

## Excision of Juvenile Pilocytic Astrocytoma of the Midbrain after Radiotherapy

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### Key Words

- Midbrain
  - Pilocytic astrocytoma
  - Radiation
  - Brain stem
  - Glioma
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### Abstract

A 13-year-old girl presented with consciousness disturbance, right hemiparesis, and impairment of hearing, swallowing, and ocular movements. A magnetic resonance image demonstrated marked hydrocephalus due to a large cystic tumor (40 × 40 × 30 mm) in the midbrain. Emergency ventricular drainage and stereotactic cyst puncture dramatically improved her condition. Since her family did not agree to surgery on the brain stem, radiotherapy was performed after ventriculoperitoneal shunting. Conventional radiotherapy of 50.4 Gy was temporarily effective, and the growth of the tumor was stabilized until approximately 8 months later when regrowth was noticed. At this stage, with the consent of her family, the tumor was removed via an infratentorial supracerebellar approach. The pathological diagnosis was juvenile pilocytic astrocytoma. The postoperative course was uneventful. No recurrence has been observed during the follow-up period of more than 6 years. This case study shows that initial excision may be appropriate for some low-grade focal lesions in the

midbrain when the histological diagnosis and consent have been obtained.

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