
Reoperation for Medulloblastoma Prior to Adjuvant Therapy.


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BACKGROUND: Surgery remains an integral part of the treatment of medulloblastoma. We present our experience with repeat surgery for this tumor before initiation of adjuvant therapy.

OBJECTIVE: To report what was found intraoperatively and where at time of second-look surgery and detail any postoperative events or readmissions within 90 days of surgery.

METHODS: Two separate institutional databases were queried to identify patients who underwent repeat resection of suspected residual medulloblastoma from January 2003 to January 2017.

RESULTS: We identified 51 patients (36 male, 15 female) who underwent repeat surgery. Average age at diagnosis was 8.31 years (range, 1.3-21.2). Imaging prior to repeat surgery demonstrated unequivocal residual tumor in 37 patients, but indeterminate in 14 patients. All but 1 patient had histopathologically confirmed residual tumor (50/51, 98%). The fourth ventricle was the primary site in 39 (76%) cases, compared with hemispheric in 12 cases (24%). Thirty (59%) tumors were non-WNT/non-SHH. All indeterminate cases (except for 1 patient) had residual tumor. Hemostatic agents were found within the resection cavity in 80% of indeterminate cases. The most common sites of residual tumor were lateral (26/39, 67%, lateral recess and/or foramen of Luschka) and roof (25/39, 64%); the superior medullary velum was the most common region of the roof (19/25, 76%). Eight (16%) patients developed new neurological deficits: cranial nerve palsies in 5 patients and posterior fossa syndrome in 3 patients.

CONCLUSION: Meticulous inspection of the resection cavity is necessary, paying particular attention to the roof and lateral recess. Hemostatic agents can conceal residual tumor.

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