

## UFHCC Research Day 2017 | Abstract Template

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### LIST ALL AUTHORS and AFFILIATIONS – underline presenting author

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### TITLE

Pattern of Failure in Adult Medulloblastoma Presenting Without Extranodal Metastasis

### HYPOTHESIS:

The hypothesis is that recurrence-free survival and patterns of recurrence are different in adults versus children with medulloblastoma.

### BACKGROUND/AIMS:

Only 10% of medulloblastomas present in adults but most treatment recommendations come from the pediatric literature. With this in mind, we assessed the long-term outcome of adult medulloblastoma patients treated at our institution.

### METHODS:

Under IRB approval, we studied the medical records of 28 patients treated with radiotherapy for adult medulloblastoma between 1971 and 2012.

Median age at diagnosis was 25 years (range, 18-77 years). 61% of patients had standard-risk disease. All patients received craniospinal irradiation with a posterior fossa boost. About half the patients were treated at 1.8 Gy each day while the other half were treated at 1.2 Gy twice a day. Median dose to the craniospinal axis was 36 Gy (range, 23.4-45.6 Gy). Median total dose to the primary site was 55.9 Gy (range, 50-70.2 Gy). Chemotherapy was used in 46% of patients.

### RESULTS & CONCLUSIONS

Eleven patients (39%) developed a recurrence, with median time to recurrence of 2.4 years (range, 0.4-7.3). The majority (82%) of recurrences developed in patients classified as having standard-risk disease at diagnosis. Of the recurrences, 55% were at the primary site only, and 36% were bone metastases without neural axis recurrence. There were no spine recurrences. None of the 4 patients with isolated bone metastasis had bone marrow biopsy at initial staging or treatment with chemotherapy. Of the 11 patients with tumor recurrence, all but 1 died of medulloblastoma.

The progression-free survival in medulloblastoma is similar in children and adults but our results suggest differences in the pattern of recurrence with isolated bone metastasis being rare in children but substantial in our adult series. Based on these results we recommend the following: (1) Initial staging in adults should include bone marrow biopsy; (2) Treatment in medically fit adults should include chemotherapy that could eliminate subclinical bone metastasis; (3) Follow-up of adults should include PET or bone scan twice a year for the first 3 years.