Abstracts

MB-105. THE EARLY OUTCOMES OF PROTON THERAPY FOR MEDULLOBLASTOMA ON THE PEDIATRIC PROTON CONSORTIUM REGISTRY

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INTRODUCTION: Medulloblastoma is among the most common brain tumors diagnosed in children in the United States. Post-operative cranio-spinal irradiation (CSI) is an important part of treatment regimens for the treatment of medulloblastoma. Proton therapy has demonstrated improved dosimetric

advantages in CSI as compared to x-ray based radiotherapy. In the United States, medulloblastoma is one of the most common pediatric malignancies treated in proton therapy centers. The Pediatric Proton Consortium Registry (PPCR) was established as a multi-institutional registry to track and follow outcomes of pediatric patients treated with proton therapy. We aim to evaluate the early outcomes of patients treated with proton CSI who have been enrolled on the PPCR. **METHOD:** The PPCR databased was queried for all patients with a diagnosis of medulloblastoma. Of the 146 patients identified, 55 patients had follow-up information at the time of the date of the data entry deadline. The average age at start of CSI for all patients was 8.7 years; 91 patients were male, and 55 female. Intent of treatment was curative for 129 patients, palliative in 2, and unrecorded in the remainder. **RESULTS:** At a medium follow up of 12.3 months, overall survival was 87.3%. Progression-free survival was 89.7% with local failure occurring in 6.9% and metastatic disease in 10.3%. **CONCLUSION:** Early outcomes from proton therapy are comparable to historic x-ray therapy outcomes. Longer follow-up is ongoing and will be needed for evaluation of the putative benefit of long-term toxicity reduction.