GCT-03. TREATMENT OUTCOMES, PHYSICAL DEVELOPMENT AND QUALITY OF LIFE OF PATIENTS WITH BIFOCAL GERM CELL TUMORS: METHODS

BACKGROUND: The optimal radiation field in patients with bifocal germ cell tumors (GCTs) is controversial. CONCLUSION: A 28-year-old man had been treated by chemoradiotherapy at the previous hospital for bifocal suprasellar and pineal lesions with the provisional diagnosis of germinoma without histological confirmation. The patient is to be treated with radiotherapy followed de-intensification of RT should be followed. BREEDING: Primary treatment with chemoradiotherapy for bifocal suprasellar and pineal lesions typically involves radiation fields that include both cranial and supra sellar regions, with the aim of treating the entire tumor volume. However, the optimal radiation field in patients with bifocal GCTs is still controversial. METHODS: This study aimed to evaluate the outcomes of radiotherapy for bifocal suprasellar and pineal GCTs and to analyze the effects of radiation field on patient outcomes.

RESULTS: The study included 15 patients with bifocal GCTs, of whom 14 had suprasellar and pineal involvement. The radiation fields included the suprasellar region, pineal region, and both suprasellar and pineal regions. The median radiation dose was 30 Gy for the suprasellar region, 25 Gy for the pineal region, and 35 Gy for both regions. The median follow-up period was 42 months. The overall survival rate was 100%, and the progression-free survival rate was 93%. No grade 3 or higher toxicities were observed. CONCLUSION: Radiotherapy for bifocal suprasellar and pineal GCTs is effective, but the optimal radiation field remains controversial. Further studies with a larger sample size are needed to determine the optimal radiation field for bifocal GCTs.

GCT-04. DIAGNOSIS OF A RARE CASE OF RECURRENT GERM CELL TUMOR BY CSF PLACENTAL ALKALINE PHOSPHATASE PRESENTING WITH DIFFUSE INTRAXIAL ABNORMALITY IN THE LOWER BRAINSTEM

INTRODUCTION: Germ cell tumors in the central nervous system typically arise in suprasellar, pineal, or basal ganglia regions, and occasionally at other sites. The present study describes a rare case of recurrent germ cell tumor presenting with diffuse intraxial abnormality in the lower brainstem. METHODS: A 32-year-old man presented with a 4-month history of progressive lower limb weakness and ataxia. Magnetic resonance imaging revealed a large, heterogeneous, intraxial mass in the lower brainstem with mass effect on the brainstem and cerebellum. CSF analysis showed elevated levels of placental alkaline phosphatase (PLAP) and elevated histidine. The patient was treated with radiotherapy followed by chemotherapy. CONCLUSION: This is a rare case of recurrent germ cell tumor presenting with diffuse intraxial abnormality in the lower brainstem. The diagnosis was made by CSF PLAP and histidine levels, which are not typically elevated in the presence of brain tumors. The patient had a complex clinical course requiring multiple interventions, including radiation therapy and chemotherapy. This case highlights the importance of considering germ cell tumors in the differential diagnosis of intraxial lesions, even in patients with an atypical presentation.