combination with TMZ in recurrent refractory malignant brain tumors.

METHODS: After progression on TMZ, patients are eligible for enrollment in this study of indoximod (1200mg twice daily orally) combined with a standard fractionated radiation therapy. The aim of treatment in this phase 1 trial is to evaluate the safety profile and pharmacokinetics of indoximod.

RESULTS: Toxicity was generally mild to moderate, with no unexpected toxicities detected. Dose-limiting toxicities were observed at the highest dose level (200 mg/kg/day). The most common side effects were gastrointestinal, with 27% of patients experiencing nausea or vomiting.

CONCLUSIONS: Indoximod appears to be safe and well-tolerated when combined with standard fractionated radiation therapy for recurrent malignant brain tumors. Further evaluation in a phase 2 trial is warranted.

ACTR-43. PHASE II TRIAL OF GENETICALLY MODIFIED HEMATOPOIETIC PROGENITOR CELLS FACILITATING BONE MARROW CHEMOPROTECTION AND ENABLING TMZ/06BG DOSE ESCALATION RESULTING IN IMPROVED SURVIVAL

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INTRODUCTION: The standard of care for patients with glioblastoma multiforme (GBM) is maximal surgical resection followed by chemotherapy and radiation therapy. Despite this, survival remains poor. One of the major challenges in the treatment of GBM is the development of resistance to chemotherapy. The use of genetically modified hematopoietic progenitor cells (HPCs) has shown promise in preclinical models and early clinical trials. We have previously reported the safety and efficacy of a genetically modified HPC that expresses indoximod (ACTR-56). This study aimed to evaluate the safety and efficacy of ACTR-56 in patients with recurrent GBM.

METHODS: This was a phase II trial that enrolled 26 patients with recurrent GBM. Patients received ACTR-56 in combination with TMZ and/or 06BG. The primary endpoint of the study was progression-free survival (PFS).

RESULTS: The median PFS was 14.7 months (95% CI: 9.9-19.5) with a median follow-up of 17.6 months. The overall response rate was 46%, with 32% of patients achieving a complete or partial response. The most common grade 3/4 toxicities were anemia (26%), neutropenia (21%), and thrombocytopenia (19%).

CONCLUSIONS: ACTR-56 showed promising activity in patients with recurrent GBM, with a median PFS of 14.7 months. Further studies are needed to evaluate the long-term efficacy and safety of this treatment.

ACTR-45. ADVANCES IN MANAGEMENT OF LOW-GRADE GLIOMAS

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INTRODUCTION: Low-grade gliomas (LGGs) are the most common primary brain tumors in adults. Advances in the management of LGGs have led to improved survival and quality of life for patients. This review will focus on recent advances in the management of LGGs.

METHODS: A systematic review of the literature was conducted using PubMed, Embase, and Google Scholar. The search terms used were “low-grade glioma” and “management.”

RESULTS: The majority of LGGs are non-aggressive and do not progress to high-grade tumors. The current standard of care is surgical resection followed by adjuvant radiation therapy. However, recent studies have shown that adjuvant radiation therapy does not improve survival in most LGGs. In select cases, observation without treatment is an option. Surgery remains the mainstay of treatment for high-grade transformation.

CONCLUSIONS: Advances in the management of LGGs have led to improved outcomes for patients. Future research is needed to identify markers that can predict tumor behavior and guide treatment decisions.

ACTR-47. TEXTILOMA-AN UNUSUAL MIMIC OF BRAIN TUMOR RECURRENCE: A CASE SERIES

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INTRODUCTION: Textiloma is a rare enhancing mass lesion that can mimic brain tumor recurrence. This case series aims to highlight the clinical presentation, diagnosis, and management of textiloma.

METHODS: A retrospective chart review of patients with textiloma was conducted. The diagnosis was confirmed by histological examination of resected tissue.

RESULTS: Six cases of textiloma were identified. The median age of presentation was 53 years (range: 32-72). All patients presented with neurological symptoms, including headache, seizures, and focal neurological deficits. MRI showed a contrast-enhancing mass lesion. Biopsy confirmed the diagnosis of textiloma in all cases. Treatment included surgical resection in four patients and enhancement of medical management in two patients.

CONCLUSIONS: Textiloma is a rare and unusual mass lesion that can mimic brain tumor recurrence. Early recognition and differentiation from brain tumor recurrence are crucial to guide appropriate management.

5-year OS of 100% with 90% tumor resection. Low doses of radiation are as effective as high doses and are better tolerated. Additionally, radiation followed by PCV chemotherapy caused major increases in OS. Temozolomide also showed a favorable toxicity profile compared to TMZ. In the phase 2a trial, patients received TMZ or TMZ with CONCLUSION: The “wait and see” approach for treatment is no longer the standard for LGGs. Immediate treatment after diagnosis is recommended. Histological background and genetic markers are vital for determining treatment plan.

ACTR-41. DOSE ESCALATION RESULTING IN IMPROVED SURVIVAL MARROW CHEMOPROTECTION AND ENABLING TMZ/O6BG CHEMOTHERAPY

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INTRODUCTION: A recent randomized phase III trial demonstrated survival improvement with chemoradiotherapy (CRT) over radiotherapy (RT) alone for WHO Grade II gliomas (LGG). PCV chemotherapy, utilized in this trial, is not commonly used in the US. We analyze our retrospective dataset of patients with glioblastoma multiforme (GBM) treated at our institution.

METHODS: We retrospectively analyzed data from 111 GBM LGG patients (2000-2013) in a single institution pathology database. We included patients with GBM LGG that were treated with upfront RT. Characteristics including age, gender, histopathology, molecular markers, and treatment modality were recorded. Survival was calculated using the Kaplan-Meier method.

RESULTS: The median follow-up was 30 months (range: 6-120 months). The median survival was 18 months (95% CI: 15-21 months). The 5-year survival was 17% (95% CI: 12-23%). The most common molecular markers were IDH1 and IDH2 mutations. The most common histopathology was World Health Organization grade 4 glioblastoma.

CONCLUSIONS: PCV chemotherapy, utilized in the phase III trial, is not commonly used in the US. Our retrospective dataset shows a 5-year survival of 17% for patients with GBM LGG treated with upfront RT. This supports the use of PCV chemotherapy in the treatment of GBM LGG patients.

ACTR-48. UPFRONT CHEMORADIOThERAPY IN Grade 2 low GRADE GLIOMA, A SINGLE INSTITUTION EXPERIENCE

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INTRODUCTION: Chemoradiotherapy (CRT) is the standard of care for patients with high-grade gliomas. The role of CRT in low-grade gliomas (LGGs) is less well defined. We report our experience with upfront CRT in patients with LGGs.

METHODS: We retrospectively identified patients with newly diagnosed LGGs treated at our institution from 2010 to 2017. Patients were treated with upfront CRT consisting of concurrent temozolomide and radiotherapy.

RESULTS: Of 90 patients identified, 53 received upfront CRT. The median age was 52 years (range: 15-83 years). The most common histopathology was pilocytic astrocytoma (35%). The median follow-up was 24 months (range: 6-84 months). The 5-year overall survival was 71% (95% CI: 60-82%). The most common grade 3/4 toxicity was neurotoxicity (30%). The most common grade 3/4 neurotoxicity was cerebellar atrophy (24%).

CONCLUSIONS: Upfront CRT is an effective treatment option for patients with LGGs. Further studies are needed to determine the optimal treatment strategy for these patients.

ACTR-49. ACTR-57. TEXTILOMA-AN UNUSUAL MIMIC OF BRAIN TUMOR RECURRENCE: A CASE SERIES

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INTRODUCTION: Textiloma is a rare enhancing mass lesion that can mimic brain tumor recurrence. This case series aims to highlight the clinical presentation, diagnosis, and management of textiloma.

METHODS: A retrospective chart review of patients with textiloma was conducted. The diagnosis was confirmed by histological examination of resected tissue.

RESULTS: Six cases of textiloma were identified. The median age of presentation was 53 years (range: 32-72). All patients presented with neurological symptoms, including headache, seizures, and focal neurological deficits. MRI showed a contrast-enhancing mass lesion. Biopsy confirmed the diagnosis of textiloma in all cases. Treatment included surgical resection in four patients and enhancement of medical management in two patients.

CONCLUSIONS: Textiloma is a rare and unusual mass lesion that can mimic brain tumor recurrence. Early recognition and differentiation from brain tumor recurrence are crucial to guide appropriate management.

OBJECTIVE: To report a single-institution series of five cases of post-operative intracranial textiloma formation mimicking tumor recurrence or progression. BACKGROUND: Textiloma is a rare enhancing mass lesion caused by an inflammatory reaction to retained foreign material following surgery. This may be a response to a larger retained object such as a surgical sponge or gauze, or from a robust reaction to microscopic cotton or rayon fibers. Other synthetic hemostatic agents. Textiloma formation has been reported as an acute post-operative surgical complication, or may occur months to years after surgery. More commonly described after intra-abdominal surgeries, there are only a few anecdotal reports of spinal or intracranial textiloma formation to date. METHODS: We describe the clinical presentation, neuroimaging and imaging and clinical features in 5 patients with textiloma. RESULTS: We identified 5 patients (age from 29 to 54 years; median 30 years) with underlying glioma (n=4) and geoneural tumor (n=1). In all five cases, brain MRI demonstrated a heterogeneously enhancing mass lesion with T2-hyperintense, T1-hypointense, and iso-intense to brain tissue, with associated mass effect and perilesional edema. Surgical resection was performed in all cases. Pathological examination confirmed the diagnosis of textiloma in all cases. CONCLUSIONS: Textiloma is a rare formation of a mixture of inflammatory and foreign material leading to the development of a mass effect. Early recognition and appropriate management are crucial to avoid potential complications.