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INN-28. POTENTIAL EFFECTIVE CONSOLIDATION THERAPY WITH SINGLE AGENT IBRUTINIB FOR A CASE WITH PRIMARY CNS LYMPHOMA AFTER INITIAL HD-MTX AND RITUXIMAB INDUCTION THERAPY

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Cloud website analytics. NCI-CONNECT referrals and study participation data were collected prospectively. RESULTS: The English website launched in September 2018 and visits have increased 2,384%. The Spanish website launched in March 2020 and visits have increased 1,137%. From April 2020 to March 2021, top website page views by English page views / Spanish page views / people living with this disease include oligodendroglioma (43,859 / 8,241 / 11,757), ependymoma (31,579 / 12,684 / 13,294), meningioma (30,261 / 19,507 / 2,692), medulloblastoma (28,487 / 9,999 / 3,840), diffuse midline gliomas (23,064 / 3,851 / 6,033), and pineal region tumors (19,939 / 9,973 / 1,297). Referral rates and participation have accelerated – 45% of patients visiting the Neuro-Oncology Clinic at NIH have a rare CNS tumor and 409 patients enrolled in an NCI-CONNECT study. CONCLUSION: Patient-focused websites can provide guidance to those affected by rare cancers outside of in-person health care visits. The NCI-CONNECT website is an educational and clinical resource for patients and families affected by rare CNS tumors and was created to raise awareness and improve patient outcomes.

INNV-27. AN INNOVATIVE VIRTUAL MULTI-INSTITUTIONAL, MULTIDISCIPLINARY NEURO-ONCOLOGY TUMOR BOARD: THE NIH-NOB EXPERIENCE DURING THE COVID-19 PANDEMIC
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BACKGROUND: The American Academy of Neurology Institute and Society for Neuro-Oncology recommend multidisciplinary tumor board (MTB) meetings as a quality metric in neuro-oncology. With the COVID-19 pandemic resulting in travel restrictions, we expanded our existing MTB by transitioning to a virtual format that maintained our commitment to providing consultation for primary CNS tumor cases. This transition permitted participation by neuro-oncology teams from over 30 Brain Tumor Trials Collaborative (BTTC)/National Cancer Institute-Comprehensive Oncology Network Evaluating Rare CNS Tumors (NCI-CONNECT) centers across the United States. Here, we describe results from opening our MTB remotely to these teams. **METHODS:** We retrospectively reviewed records from remote MTB meetings held between April 2020 and March 2021. To gauge the impact of our MTB on clinical management, we administered a brief survey querying BTTC members. **RESULTS:** Twenty-eight providers presented 41 cases during 24 virtual MTB meetings (range: 1-4 cases per meeting). Two cases (5%) were presented only for educational value. Approximately half (54%) of the cases discussed dealt with diagnosis/management of an NCI-CONNECT rare CNS tumor. During MTB discussions of the 39 cases seeking diagnosis/management recommendations, 32% received clinical trial recommendations, 10% were suggested to enroll in the NCI Neuro-Oncology Branch (NOB) Natural History Study (NCT02851706), 17% received a recommendation to obtain central neuropathology review, and 100% received recommendations for further disease management. Most

BTTC survey respondents (83%) found these recommendations impactful in the management/treatment of their presented case or generally useful/informative for their clinical practice. **CONCLUSION:** We describe the feasibility and utility of an innovative virtual multi-institutional MTB. These novel remote meetings allowed for discussion of complex neuro-oncology cases and recommendations from experts, particularly important for those with rare CNS tumors. Our study's findings during the COVID-19 pandemic of the value of providing remote access to MTBs should apply post-pandemic.

INNV-28. POTENTIAL EFFECTIVE CONSOLIDATION THERAPY WITH SINGLE AGENT IBRUTINIB FOR A CASE WITH PRIMARY CNS LYMPHOMA AFTER INITIAL HD-MTX AND RITUXIMAB INDUCTION THERAPY

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INTRODUCTION: Primary CNS Lymphoma (PCNSL) is a rare and aggressive cancer that originates from lymphocytes and develops in the central nervous system. Standard induction therapy involves high-dose methotrexate (HD-MTX)-based chemotherapy, which achieves complete or partial response in most PCNSL patients. However, there is no standard consolidation therapy. We report one case in which ibrutinib, a Bruton's tyrosine kinase inhibitor, replaced low-dose WBRT as consolidation therapy after induction by HD-MTX and rituximab. Ibrutinib treatment yielded good tolerance and further resolution of small residue lymphoma. **CASE REPORT:** The patient is a 77-year-old female who presented with slurred speech, right-sided weakness, and difficulty word-finding in early 2020. Brain MRI found multifocal lesions, and biopsy of the largest lesion near the left lateral ventricle revealed diffuse large B cell lymphoma. The patient began HD-MTX at 6 g/m² for the first cycle of induction therapy. She continued HD-MTX every two weeks, but dosage was reduced every cycle due to worsening renal function. Ultimately, MTX was discontinued after 6 cycles. Brain MRI showed significant response after HD-MTX except for small residue lymphoma at the biopsy area. 2nd line regimen rituximab and temozolomide was given to complete induction. Brain MRI was stable, but the small enhancing residue lymphoma at left peri-ventricle area was persistent after the induction therapy (uCR). Ibrutinib as consolidation therapy began after discussion with the patient. The patient tolerated 560 mg ibrutinib for 6 cycles initially, then switched to a reduced dose of 420 mg for cycles 7 and 8 due to neutropenia. Brain MRIs have been stable with resolution of the small lymphoma residue after 6 cycles of ibrutinib. The patient continues ibrutinib for the goal of one year of consolidation therapy. **DISCUSSION:** Our case highlights the potential of single-agent ibrutinib as consolidation therapy for PCNSL after HD-MTX and rituximab/temozolomide induction therapy.

INNV-29. BILATERAL PARIETAL LYMPHOMA LESIONS RESPONDED DIFFERENTLY TO HD-MTX AND RITUXIMAB/TEMOZOLOMIDE THERAPY

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INTRODUCTION: Primary CNS lymphoma is a rare aggressive hematological malignancy. Current chemotherapy for induction phase is HD-MTX single agent or HD-MTX based combination regimen. We report a rare case whose left and right parietal lymphoma lesions in the brain responded to different induction therapy regimens during the induction phase. **CASE REPORT:** A 43-year-old female presented with seizure and her brain MRI showed bilateral parietal brain lesions in January of 2020. Biopsy and work-up revealed primary CNS diffuse large B-cell lymphoma (DLBCL). The patient underwent HD-MTX therapy. Brain MRI showed clear progression of left parietal lymphoma but stable right parietal lymphoma after two cycles of HD-MTX at 8 g/m². The treatment was switched to a rituximab 750 mg/m² weekly and temozolomide 150 mg/m² daily one-week-on and one-week-off regimen. After 8 weeks, her brain MRI showed nearly complete response of her left parietal lymphoma to rituximab/temozolomide but progression of her right parietal lymphoma. She was switched back to HD-MTX and completed total 8 cycles. Her right parietal lymphoma lesion showed complete response to HD-MTX. The patient is doing well and has been off the treatment over the past 10 months and is waiting for consolidation therapy with autologous stem cell transplantation that has been postponed due to the COVID pandemic. **DISCUSSION:** Our case highlights the very rare heterogeneous feature of primary CNS lymphoma responding to different treatment regimen. Biopsy of bilateral heterogeneous lesions may be indicated to compare the different molecular features of the lymphoma to find underlying mechanism if they respond to treatment differently. Specific treatment regimen should be selected based on the responsiveness of CNS