toxicities was high (92%), but mostly manageable without major complications. Fourteen patients received 3 g/m², 4 patients received 2 g/m², 7 patients received 1 g/m² of cytarabine, and the rate of grade 4 leucopenia/thrombocytopenia was 64%/57%, 25%/60%, and 28%/29%, respectively.

DISCUSSION: HD-cytarabine consolidation therapy with dose modification according to age groups for PCNSL was feasible and well-tolerated in patients 80 years of age or younger. The efficacy of HD-cytarabine was undetermined and further investigation is warranted.

ML-09
THE REAL-WORLD OF ELDERLY PCNSL THERAPY IN TOHOKU AND NIIGATA AREA ACCORDING TO RETROSPECTIVE ANALYSIS: A COLLABORATIVE INVESTIGATION OF THE TOHOKU BRAIN TUMOR STUDY GROUP
Kenichiro Asano,1 Yoji Yamashita, Takahiro Ono,1 Masanobu Natsume,2 Takaki Reppu,1 Kenichiro Matsuda,1 Masahiro Ichikawa,3 Masayuki Kanamori,2 Masashi Matsuzaka,2 Akira Kudo1,4 Kiyoshi Saito,1 Yukihiko Sonoda,1 Kuniko Ogasawara,1 Yukihiko Fuji,1 Kuniki Shimizu,1 Hiroki Okhuma,1 Chifumi Kitakanai,1 Takamasa Kayama,2 Teiji Tominaga,1 1Department of Neurosurgery, 2Hiroshi University Graduate School of Medicine, Hiroshima, Japan

INTRODUCTION: Recently, the number of cases of primary central nervous system lymphoma in elderly patients (EL-PCNSL) has been increasing. However, the treatment may be insufficient because of poor performance status and pre- and posttreatment complications. Therefore, we analyzed the risk factors for EL-PCNSL in the Tohoku and Niigata areas of Japan and clarified the real-world of EL-PCNSL therapy.

MATERIALS & METHODS: We reviewed medical and non-surgical treatment cases of patients aged 71 years or older from eight facilities during the last 8 years. We analyzed patient information, radiotherapy/chemotherapy or not, PFS, OS, RR, second-line therapy, pre- and posttreatment complications, outcomes, and risk factors for poor prognosis. The log-rank test was used for univariate analysis, and Cox regression analysis was used for a multivariate analysis of risk factors.

RESULTS: Of the 142 cases registered, five differed from PCNSL pathologically, receiving BSC were excluded, 31 were treated without biopsy, three were treated based on CSF-findings, and 100 were treated with biopsy. Total 134 cases were followed. The median age was 76 years, pretreatment KPS was 50%, and 118 cases (88%) had 21 pretreatment complications. The treatment contents consisted of various combinations depending on the attending physician. The retrospective overall PFS was 16 months and OS was 24 months. In the elderly treatment group, 21 cases with dropout, four cases with undetermined, and two cases with four complication deaths occurred. There were 77 deaths (58.3%), 39 internal tumor deaths (31%), and 33 complication deaths (24%). Poor prognostic risk factors were <60% posttreatment KPS, complications involving pretreatment cardiovascular and central nervous system disease, posttreatment pneumonia or severe infection, and absence of radiation or chemotherapy.

CONCLUSIONS: Pretreatment KPS did not affect outcome, but pretreatment KPS <60% and pre- and posttreatment complications did. Radiotherapy and chemotherapy are reportedly effective, but additional research to clarify the details of these modalities is needed.

ML-14
RE-CHALLENGE AND MAINTENANCE THERAPY OF METHOTREXATE FOR ELDERLY PCNSL PATIENTS WITH LOW SCORE MPS
Takashi Yamaguchi1, Rie Nagayama1, Akira Gomi,1 Kenseku Kawai1,2 1Department of Neurosurgery, 2Jichi Medical University, Shimotsuke, Japan

PURPOSE: The delayed neuronal toxicity after high dose methotrexate (HD-MTX) followed by radiotherapy (RT) is a serious problem for elderly primary CNS lymphoma patients. We started maintenance therapy (MT) with MTX after achieving complete remission (CR) to defer RT for elderly and poor Karnofsky Performance Scale (KPS) patients.

METHODS: We performed HD-MTX (3.5 g/m²) therapy until achieving CR, and if the irradiation dose can be reduced or avoided with R-MPV-A, ADL maintenance will be expected in elderly patients.

RESULTS: Number of patients was 9. Median age, median KPS, and median follow-up periods were 73.0, 71% (30–60), and 14.0 months (1–55), respectively. CR rate was 78% and two patients were not achieved CR due to the adverse events (AEs) which were acute tubular necrosis and pneumocystis pneumonia. Between which, there was no AE by MT. Median OS, median PFS, median time of radiation free period and delayed neuronal toxicity were 19.5 months (95% CI: 3–NA), 5.0 months (95% CI: 2–22), 2.5 months, and 8.2 months, respectively.

DISCUSSION: The results of this study might be inferior to other reports of elderly patients due to poor median KPS. And low introduction rate of MT was undesirable. However, once MT was introduced, MT itself was safe and had potential to manage the longer progression-free survival.

CONCLUSION: Rechallenge of HD-MTX and maintenance therapy of MTX might be promising but the problems of some serious AEs and low CR rate with HD-MTX alone should be resolved.