cation for focal-onset seizures, with or without focal to bilateral tonic-clonic seizures, and generalised tonic-clonic seizures. This study evaluated PER's effectiveness and safety when used in everyday clinical practice to treat epileptic seizures with tumour aetiology. MATERIAL AND METHODS: Patients with epilepsy with tumour aetiology were identified from a pooled analysis of 44 prospective/retrospective/cross-sectional clinical practice studies. Retention was assessed after 3, 6 and 12 months of PER treatment. The primary outcome was the seizure responder rate (≥50% seizure frequency reduction), seizure freedom rate (no seizures since at least the prior visit), and the proportions of patients with unchanged or worsening seizure frequency. Adverse events (AEs), psychiatric AEs, and AEs leading to discontinuation were also evaluated. RESULTS: Overall, 127 patients with focal-onset and/or generalised-onset seizures with tumour aetiology were identified (mean age, 46.6 years; 54.8% male; mean duration of epilepsy, 9.7 years). Seizure types at baseline were focal-onset only (97.6%), generalised-onset only (1.6%), and focal-onset and generalised-onset (0.8%). Mean time under evaluation PER treatment and last visit were 2.6 (1.4) and 5.2 (2.5) mg/day, respectively. At 3, 6 and 12 months, retention rates were 80.0%, 79.3% and 65.3%, respectively. Reasons for discontinuation included AEs (16.8%) and lack of efficacy (5.3%). Mean time under treatment was 11.0 months. At 12 months, 71.2% of patients were responders and 38.3% were seizure free; 11.9% and 3.4% of patients had unchanged and worsening seizure frequency, respectively. At the last visit (last observation carried forward), responder and seizure freedom rates were 69.0% and 57.5%, respectively, and the proportions of patients with unchanged or worsening seizure frequency were 15.3% and 6.8%, respectively. AEs were reported for 36.2% of patients, most frequently dizziness/vertigo (13.8%) and somnolence (9.5%). AEs led to discontinuation of 16.8% of patients and 13.0% of patients in whom AEs were reported (p=0.364). For patients who received only biopsy, 2.4 times more hazards of worse OS were revealed (HR 3.36, CI95% 2.30-4.90, p<0.001). In these cases, the therapeutic approach presented here appears unconventional. This is the first series demonstrating that chemotherapy is an efficient treatment in PCNSL, with an excellent long-term outcome and the absence of neurotoxicity, and calling into question the relevance of the IPCG criteria for the evaluation of their therapeutic response.

P11.10.A. AN ASSESSMENT OF PREDICTIVE FACTORS FOR OVERALL SURVIVAL IN GLOBLASTOMA - MGMT METHYLATION IS SOLELY IMPORTANT FOR YOUNGER PATIENTS

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BACKGROUND: Diverse groups of factors - neuropathological characters, tumor position and epidemiological data - have been proposed for outcome evaluation of glioblastoma (GBM). We compared clinical signs, neuropathological features and the loci of the tumor with the follow-up data, MATERIAL AND METHODS: All adult patients with firstly diagnosed and histologically proven GBM (according to WHO 2016), which were operated in our center between January 2010 and June 2021 were retrospectively assessed. Epidemiological, clinical and neuro-pathological characteristics were acquired from our institutional neuro-oncological database. RESULTS: A total of 399 patients could be evaluated. The mean follow-up was 13.0 months (CI95 12.9-13.1). Within 266 (67%) patients were deceased. Estimated mean OS for entire cohort was 24.2 months (CI95 19.8-28.7). Age, MGMT promoter methylation, brainstem localization or if a patient received biopsy only showed significant impact on OS. Each year of age was counted as a 0.1% increased risk of death (HR 1.001, CI95 1.000-1.002, p<0.001). If patients were younger than 65 years, mean OS was 34 months (CI95 26.5-41.8) compared to older than 65 years patients with a mean OS of 14.3 months (CI95 10.5-18.1, p<0.001). Generally, an unmethylated MGMT promoter status was significantly linked to a higher hazard to decease (HR 1.75, CI95 1.27-2.40, p=0.027). If MGMT promoter status was methylated, mean OS was 25.7 months (CI95 19.9-31.5) or more compared to unmethylated with 14.3 months (CI95 12.0-16.9, p=0.01). Presence of MGMT promoter methylation showed influence on OS only in the younger cohort (<65y, mean OS 38.7 months [CI95 28.9-48.6]; HR 2.60 [CI95 1.55-4.37], p<0.001) as opposed to unmethylated MGMT (mean OS 17.7 months [CI95 14.1-21.2], p=0.001). In the older cohort (>65y) presence of MGMT promoter methylation showed influence on OS only in the younger cohort (<65y, mean OS 38.7 months [CI95 28.9-48.6]; HR 2.60 [CI95 1.55-4.37], p<0.001) as opposed to unmethylated MGMT (mean OS 17.7 months [CI95 14.1-21.2], p=0.001). In the older cohort (>65y) presence of MGMT promoter methylation showed influence on OS only in the younger cohort (<65y, mean OS 38.7 months [CI95 28.9-48.6]; HR 2.60 [CI95 1.55-4.37], p<0.001) as opposed to unmethylated MGMT (mean OS 17.7 months [CI95 14.1-21.2], p=0.001). In these cases, mean OS was 7.1 months (CI95 5.3-8.8). Other factors, including gender or preoperative seizures, as well as EGFR, p53, IDH1, ATRX, IDH2 and TERT status did not show impact on OS in our series. CONCLUSION: In our cohort, MGMT promoter methylation showed an impact on OS only in younger patients <65 years of age. Biopsy of GBM should only be considered very selected patients when resection is not possible.

P11.10.B. STEREOTACTIC RADIOSURGERY FOR BRAIN METASTASES - OUTCOME AND PROGNOSTIC FACTORS IN PATIENTS TREATED WITH SINGLE-FRACTION AND MULTIPLE-FRACTIONS

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BACKGROUND: Stereotactic radiosurgery (SRS) is preferred when whole brain radiotherapy (WBRT) for the treatment of patients with a limited number of brain metastases, both as primary treatment and after surgery. SRS can be delivered in a single fraction (SF) or in multiple fractions (MF) depending on tumor size and location. The aim of this single-center retrospective study was to evaluate intracranial control and overall survival (OS) in patients who received SF and MF SRS for brain metastases. MATERIAL AND METHODS: All patients treated with primary SRS for brain metastases at Aarhus University Hospital between 2015 and 2020 were identified. Independent of undergoing surgery, SF SRS (20 Gy) was administered for targets >2 cm in diameter, MF SRS (2-27 Gy in 3 fractions) for targets >2 cm. SRS was not combined with WBRT. Treatment response was evaluated by 3-monthly MRI-scan. To evaluate intracranial control, first events were scored as local-only failure (tumor progression at the SRS treatment site), distant failure (tumor progression not at the SRS site), and combined failure (local and distant failure). Actuarial incidence of local failure (local-only and combined) and OS were estimated using the Kaplan-Meier method. To analyze the association of SF and MF SRS with local failure, Cox regression models were used. RESULTS: The consecutive cohort consisted of 196 patients treated for 275 brain metastases. The most frequent primary disease was non-small cell lung cancer (NSCLC n=96), followed by renal cell carcinoma (n=26) and breast cancer (n=22). SRS was delivered to 1 (n=13), 2 (n=49), 3 (n=12), and 4 (n=2) targets per patient. SF and MF SRS was used in 99 (51%) and