worse NFS. Among patients with disease progression (n=112), all symptoms, except seizures, worsened from first assessment to time of progression. Up to 22% of patients reported worsening mobility, self-care, and usual activity; 47% showed 35% worsened KPS and 36% worsened KPS and functions were each individually reported by at least 10% of patients as having worsened the most. Worsening of symptoms and functions was not observed among patients with stable disease, except in difficulty understanding and communication. Some patients experienced cognitive decline during follow up. Consideration of individual differences may yield additional information.

NCOG-21. PREDICTORS OF SURVIVAL IN ELDERLY PATIENTS UNDERGOING SURGERY FOR GBM

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BACKGROUND: An increasing number of elderly patients are being diagnosed with GBM and undergoing surgery. These patients often present with multiple medical comorbidities and have significantly worse outcomes compared to adult patients. The goal of this study was to determine clinical predictors of survival in elderly patients undergoing surgery for GBM.

METHODS: A retrospective chart review of all consecutive patients 65 years of age and older that underwent surgery for newly diagnosed GBM between 2003 and 2018. METHODS: We identified a total of 118 patients from our institutional database. The primary outcome was survival after surgery. Clinical, demographic, and preoperative factors were tested for association with survival using univariate and multivariate analysis. RESULTS: The median survival after surgery was 14.7 months. In univariate analysis, age, Karnofsky Performance Status (KPS) after surgery, and adjusting for age, CCI, MGMTp methylator status, and baseline KPS were the best predictors of survival. CONCLUSIONS: Age, Karnofsky Performance Status after surgery and adjusting for age, CCI, MGMTp methylator status, and baseline KPS were the best predictors of survival. The presence of medical comorbidities and advanced age are not reasons to exclude patients from consideration for resection. Glioblastoma is the most significant predictor of survival in elderly patients and can be avoided by a short length of stay and discharge home.
NCOG-24. REAL-WORLD ANALYSIS OF OUTCOMES OF PATIENTS REceiving BEVACIZUMAB FOR RECURRENT GGBM IN BRITISH COLUMBIA

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BACKGROUND: Bevacizumab (Bev) has been publicly funded in British Columbia (BC) since 2011 for treatment of recurrent glioblastoma (rGBM). We performed a retrospective outcomes assessment of patients with rGBM treated with Bev. METHODS: Patients with rGBM treated at BC Cancer centers with Bev between January 2011 and December 2016 were reviewed. Patient demographics, tumor characteristics, treatment regimens, and dates of radiographic progression and death were collected. Kaplan-Meier method was used to assess survival, and comparisons were made using the log-rank test. 138 patients were reviewed. There was a median of 13 patients receiving Bev (72%) were treated with multiple lines of therapy prior to Bev, with a median age of 45 (range 18 – 79) and KPS ³ 90 (51%). The majority had high-grade (70%) brain tumors (83%) and tumors (BT) with 1 prior recurrence (60%) and 25% were on treatment. Clinical visits were primarily conducted via telehealth (44%) and 20% of all patients were diagnosed with progression at the time of assessment. Most commonly reported moderate-severe symptoms among BT patients were fatigue (30%), difficulty remembering (28%), feeling drowsy (22%). Among spinal cord tumor patients, fatigue (39%), pain (35%) and numbness/tingling in arms/legs/trunk (35%) were most frequently reported. These symptoms were reported in similar frequencies by the normative sample. Nearly half of the COVID-19 year sample (48%) reported moderate-severity symptoms and interference. Reported problems with mobility (21%), self-care (19%), pain/discomfort (40%), and usual activities (30%) were similar in both groups except for increased mood disturbance (53%) was reported during the COVID year. CONCLUSION: These findings support CNS tumor patients remained highly symptomatic with significant impact on health-related quality of life during the COVID year. Clinicians should develop timely individual care plans to help BT patients navigate their disease course. Evaluation of risk associated with more severe symptoms and functional limitations are ongoing.

NCOG-25. VISITING THE PIGNATTI RISK SCORE IN LOW-GRADE GLIOMA PATIENTS IN THE MOLECULAR ERA

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Until now, the Pignatti risk score has been used to guide treatment decisions after a pathological diagnosis of diffuse glioma WHO grade 2. However, its prognostic value was derived from a historic cohort that has been diagnosed by morphologic rather than molecular criteria. We re-challenged the Pignatti score in a contemporary, molecularly characterized cohort. From our institution, a cohort of 422 diffuse glioma patients WHO grade 2, 228 were classified for whom IDH mutation status was known and 1p/19q co-deletion or loss of ATRX expression unambiguously classified tumors into astrocytoma or oligodendroglioma. Patients with IDH wildtype astrocytoma (n=9), multi- line crossing (p=0.003; HR=3.54) were identified as independent prognostic factors including the individual items of the Pignatti score (astrocytoma; age ≥40 years; neurologic deficit; maximum tumor diameter ≥6cm; tumor crossing midline) were correlated with progression-free survival (PFS) by univariate log-rank and multivariate Cox regression with astrocytoma or oligodendroglioma were analysed of whom 109 (66%) did not receive adjuvant radio- or chemotherapy. 94 untreated patients with a minimum follow-up of 24 months entered survival analysis. These patients were classified as “high-risk” (Pignatti 3-5) and “low-risk” (Pignatti 0-2). In 15% and 85% and did not differ with regard to potential prognostic factors (gender; resection vs. biopsy; tumor recurrence) other than the individual Pignatti score items. Diameter ≥6 cm (p=0.006; HR=2.18) and midline crossing (p=0.003; HR=3.54) were identified as independent prognostic factors of PFS. Noteworthy, prognostic factors co-occurred when all patients (n=144) with a minimum follow-up of 24 months, regardless of adjuvant treatment, were analysed. In IDH mutant, molecularly characterized diffuse gliomas WHO grade 2, the Pignatti risk score as a whole no longer seems to be of prognostic relevance. Instead, outcome seems to be determined by tumor burden.

NCOG-26. SOCIOECONOMIC FACTORS AFFECTING SURVIVORSHIP OF GGBLASTOMA PATIENTS IN THE PHILIPPINES: A RETROSPECTIVE COHORT STUDY

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BACKGROUND: Glioblastoma (GBM) is the most common malignant primary brain tumor in adults worldwide. However, data on the survivorship of glioblastoma for low-middle income countries is sparse. We studied the clinical features, treatment, and survivorship of surgically managed GBM patients at a tertiary referral center in the Philippines over a 5-year period. We determined whether socioeconomic factors such as income level, employment status, marital status and educational attainment affected survival. METHODS: A retrospective cohort study within a 5-year period (2015 to 2019) of surgically managed GBM patients in a single center was conducted using chart review and telephone interview. RESULTS: A total of 48 cases met the inclusion criteria. Mean age of the cohort was 41 years, with a male predilection (62%). Mean duration of symptoms was 2.8 months. Majority of the tumors were > 5 cm at the time surgery (90%), and involved more than one lobe (85%). Majority (73%) had postoperative Karnofsky (KPS) ≥ 70, and underwent subtotal resection (56%). Only 15% (n=7) had adjuvant chemoradiotherapy while another 23% (n=11) had radiotherapy alone. Median overall survival (OS) was 7.6 months (228 days). Most patients had rural residence (56%), low-income (85%), full time employment (79%), married status (73%) and secondary education (44%). Multivariate analysis showed that only extent of resection (GTR p=0.0297 and STR p=0.0400) were associated with improved survival while widower status (p=0.0116) were significantly more at risk. CONCLUSION: Many glioblastoma patients managed at our center in the Philippines presented at an advanced stage in their natural history, with larger tumors and more extensive distribution at time of presentation. After surgery, majority did not receive adjuvant treatment. As such, the median overall survival was less than that reported in published cohorts in developed countries. Extent of resection and marital status were significantly associated with survivorship.

NCOG-27. STATUS AS A CLINICAL TRIAL PARTICIPANT AND OUTCOME IN IDH-WILDLTYE GGBLASTOMA

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INTRODUCTION: Standard of care for glioblastoma consists of surgery followed by combined chemoradiation and adjuvant chemotherapy, as per the seminal EORTC study from 2005. Clinical trial patients, being a population selected for functional status, hepatic function, renal function, and lack of other malignancies, may have improved outcome over the general treated population. METHODS: Single center retrospective analysis of status as a clinical trial patient in the apixap setting and other