

reviewed the clinical, radiological and laboratory data of 32 patients diagnosed of ischemic stroke secondary to a state of hypercoagulability associated with cancer between 2007 and 2017. **RESULTS:** 15/32 were women. The median age was 65 years (range: 48–82). In 4/32 patients, stroke led to the diagnosis of advanced stage cancer, and in 15/32 it occurred in the context of uncontrolled cancer progression. 24/32 patients had at least an additional vascular risk factor. Complementary tests were performed (blood analysis, carotid echo-Doppler, ECG-monitoring, echocardiogram) to rule out other aetiologies. 25/32 patients had acute ischemic lesions in 3 to 5 cerebrovascular territories. 23/32 had multiorgan infarctions in body CT. The D-Dimer was analysed in 14/32 patients, being elevated in 13/14 patients. Half of patients (16/32) suffered a recurrence of stroke in the first 4 weeks. Most frequently detected tumours were lung adenocarcinoma (11/32) and pancreatic adenocarcinoma (8/32). The median survival after the stroke was 1 month (range: 0.2–25 months). **CONCLUSIONS:** Uncontrolled cancer may lead to a prothrombotic state that facilitates the development of strokes in multiple cerebrovascular territories. Recurrences are frequent despite anticoagulant therapy, and prognosis is poor because of the underlying cancer and stroke-related neurological deterioration.

P14.120 PHASE II STUDY OF WEEKLY CARBOPLATIN IN PRETREATED ADULT MALIGNANT GLIOMAS

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BACKGROUND: Patients with relapse of recurrent glioma have a poor outcome and limited treatment options. The aim of this study is to investigate the clinical benefit and tolerability of weekly intravenous administration of carboplatin-based monotherapy in adult glioma patients who had progressed from previous chemotherapy lines based on temozolomide and nitrosoureas. **MATERIAL AND METHODS:** This was a single arm, Phase II study. Eligibility criteria included progressive or recurrent malignant glioma after radiotherapy and chemotherapy-based treatments and Karnofsky Performance Status (KPS) > 60. **RESULTS:** Thirty-two patients (median age: 43.5 y) were enrolled to receive weekly carboplatin monotherapy in intravenous mode of administration. The median duration of response was 7.3 months with an overall disease control rate of 31.3%. Median progression-free survival (PFS) was 2.3 months while overall survival (OS) was 5.5 months. Patients achieving clinical benefit exhibited a longer PFS (4.6 vs 1.5 months; $p < 0.001$) and OS (7.9 vs 3.2 months; $p = 0.041$) compared to those not achieving clinical benefit. **CONCLUSION:** Our findings show that single agent, weekly, intravenous carboplatin may have a role in the treatment patients with recurrent malignant glioma

P14.121 USE OF CORTICOSTEROIDS IN GLIOBLASTOMA PATIENTS A SINGLE INSTITUTION EXPERIENCE

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INTRODUCTION: Corticosteroids are group of drugs widely used in patients with glioblastoma. As they control peritumoral oedema, virtually all patients are at some time receiving one. Though, they are effective drugs, their use comes with many side effects affecting the QoL, and might even have a detrimental effect on survival. **PATIENTS AND METHODS:** We collected the data of patients treated for glioblastoma in Slovenia between 1997 and 2016. In our database of 1051 patients, we calculated the survival and progression free survival. Then we checked the corticosteroid use for every individual patient at the time of referral, beginning of radiotherapy (RT), completion of RT, at 3 and 6 months. We stratified patients according to the resection extent, performance status, age groups, and treatment intent. We also looked for any adverse effect which could be connected to corticosteroid usage. Due to historical circumstances, we did not have a peroral dexamethasone in Slovenia until 2012, so patients regularly received methyl prednisolone instead, though they received parenteral dexamethasone. We are reporting all corticosteroid doses calculated and expressed in milligrams of dexamethasone. **RESULTS:** At the time of referral, 90 % of patients received corticosteroids. Median dose was 4 mg of dexamethasone 2 times daily (0 to 8 mg 3 times daily). In around half of patients, dexamethasone could be lowered prior to radiotherapy. Factors preventing early tapering were: biopsy only, higher age and performance status. Tapering of dexamethasone than continued after completion of RT. Beside corticosteroid diabetes, proximal myopathy was the most frequent adverse effect, followed by osteoporosis. The group of patients, surviving more than 3 years, had significantly lower dose of corticosteroids at the end of RT than other patients, while there was no difference in dose at the time of referral and afterwards. Tapering of the dose was quicker with the younger patients and also when patients received methyl prednisolone. The patients

receiving methyl prednisolone also had more problems with osteoporosis. **DISCUSSION:** Our data confirms the benefits and dangers of corticosteroid usage. While all are aware of the corticosteroid diabetes and osteoporosis, the myopathy was most commonly expressed complaint in our patients and might be underreported, especially, when weakness might also be attributed to underlying disease. Not only, is the higher dose of dexamethasone associated with more common and more severe adverse effects, but one could question if there is more direct connection of corticosteroids and survival. **CONCLUSION:** While the corticosteroids remain essential medications in glioblastoma patients, they should be used with care. Tapering of the corticosteroids should start as early as possible. Balance between the beneficial effects of corticosteroids and their detrimental effects should be reached.

P14.122 INTEGRIN $\alpha 5$ IS A POOR PROGNOSTIC FACTOR IN PATIENTS WITH GLIOBLASTOMA TREATED BY THE STUPP PROTOCOL

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BACKGROUND: Integrin $\alpha 5 \beta 1$ was suggested to be involved in glioblastoma (GBM) aggressiveness through preclinical studies and genomic analysis of several cohorts of patients. However, protein expression data are still missing to confirm this hypothesis. Our aim was to investigate the prognostic value of integrin $\alpha 5$ protein expression level in GBM. **MATERIAL AND METHODS:** We retrospectively determined the protein expression level of integrin $\alpha 5$ using immunohistochemistry in tumors from patients treated in 6 French centers. Paraffin sections of GBM were labeled by immunofluorescence and analyzed by confocal microscopy. The corresponding clinical and survival data have been identified and analyzed. The primary end-point was overall survival (OS). **RESULTS:** Out of 297 patients newly diagnosed with GBM between 2006 and 2013, 152 met the inclusion criteria (scheduled for initial treatment with the Stupp protocol, age > 18 years) and 95 tumor samples were suitable for immunohistochemical analysis. The median age is 58 years, (64 men, 34 women). Most of patients received macroscopic (43%) or partial (36%) surgery. In univariate analysis using the Log Rank test, high integrin $\alpha 5$ expression level was associated with poor prognosis (PFS: hazard ratio (HR) = 1.696, $p = 0.0355$; OS: HR = 1.598, $p = 0.0508$). Corresponding median OS were 15.6 versus 19.2 months. Similarly, OS was significantly reduced with age (> 60 years), lower resection degree, higher RPA (recursive partitioning analysis) score and non-methylated MGMT (O-6-methylguanine-DNA methyltransferase) promoter. In the subgroup of patients who received the full initial protocol (temozolomide treatment together with radiotherapy and later as adjuvant treatment; $n = 58$) mean OS was strongly reduced when integrin $\alpha 5$ expression level was high (15.6 versus 22.8 months, $p = 0.0162$) suggesting an impact of integrin signaling on temozolomide response in GBM. **CONCLUSION:** Our study validates for the first time that the high protein level expression of $\alpha 5$ integrin is associated with poor prognosis in GBM. It also confirms its potential as a therapeutic target and its likely role in resistance to temozolomide as previously shown in preclinical study.

P14.123 NEUROLOGICAL COMPLICATIONS RELATED TO CHECKPOINTS INHIBITORS

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BACKGROUND: Currently, immunotherapy is part of the therapeutic arsenal for oncological treatment. Indeed, the need for new medications has led to the development of immune checkpoint inhibitors. Despite favourable oncological outcomes, these treatments have been associated with immune-related adverse events. Although infrequent, neurological toxicities have been reported. Early recognition is crucial for improvement of functional outcome and requires a multidisciplinary approach. **OBJECTIVE:** To describe a case series of patients with neurological complications related to checkpoint inhibitors. **PATIENTS AND METHODS:** We identified six oncological patients who presented immunomediated neurological complications, derived from the use of checkpoints inhibitors. Five cases were men. Ages ranged from 58 to 73 years. Nivolumab, alone or