aim of this study is to evaluate the impact of regorafenib on the cognitive functioning and quality life of adult with glioblastoma.

Methods

Patients with early progression to MRI after radiotherapy and chemotherapy are included in the study. They are monitored every 3 months using a 30 min neuropsychological battery of ad hoc tests as follows: long-term verbal memory (Hopkins Verbal Learning Test-Revised), executive functions (Controlled Word Association Test) and visual attention, ideomotor speed, spatial research (Trial Making Test). Quality of life is assessed using the European Organization Research Treatment Cancer (EORTC) quality of life questionnaires for brain tumors (C30, BN20). The timing of the assessment is before regorafenib (baseline), after three and six months of treatment.

Results

Since February 2021, ten patients, six males and 4 females with an age range of 24–74, were eligible to enter the study and have started cognitive and quality of life monitoring. The study is ongoing.

Conclusions

The expected results concern the trend of cognitive functioning and quality of life (improvement vs stability vs deterioration) and the identification of the types of cognitive functions most involved. Progression represents a critical issue for the study, as some of these patients could drop out during the monitoring phases.

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118446

The association between IDH1 mutation and MGMT promoter methylation in Indonesian glioma patients

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Background and aims

Gliomas are one the most common brain tumors in adults. IDH mutation occurs in approximately 80% of all lower-grade glioma (LGG) and secondary GBMs. MGMT promoter methylation is an important marker to predict response to temozolomide chemotherapy. IDH1 mutation has been shown to be associated with MGMT promoter methylation. However, data about this from Indonesian glioma patients is very limited. Here we assessed the association between IDH1 mutation and MGMT promoter methylation status in Indonesian glioma patients.

Methods

This was a retrospective study involving patients with glioma in Dr. Sardjito General Hospital and the affiliated hospitals. Genomic DNA was extracted from fresh glioma tissues or formalin-fixed paraffin-embedded (FFPE) samples. Mutation analysis was performed using Polymerase Chain Reaction-Restriction Fragment Length Polymorphism (PCR-RFLP) or DNA sequencing. MGMT promoter methylation status was identified using methylation-specific quantitative real-time PCR.

Results

In total, 121 patients were included in this study. There were 29 patients with mutations in the IDH1 gene and 34 patients with MGMT promoter methylation. There was a higher proportion of MGMT methylation in the IDH1 mutant group than the IDH1 wild-type group (58.6% vs. 18.5%, $p < 0.001$).

Conclusions

There was a significant association between IDH1 mutation and MGMT promoter methylation in Indonesian glioma patients.

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Abducens nerve schwannoma: A case report

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Background and aims

Abducens schwannomas are rare tumors, representing less than 1% of all intracranial schwannomas in the literature. The tumor may be located within the cavernous sinus or more commonly at the prepontine region.

Methods

We reported a case of patient referred to the neurology department in Sahloul Hospital, Tunisia diagnosed with Abducens schwannomas.

Results

A 50-year-old woman presented with one month history of horizontal diplopia and headache. Right abducens nerve paresis was noted on neurologic examination. Facial sensation and corneal reflex were normal. The remainder of the physical examination was normal. Magnetic resonance imaging revealed a 6 x 5 mm sized heterogeneously enhancing mass in the right cerebellopontine angle. Although schwannoma was suggested. Gven the small size of the tumor, surgery was not indicated.

Conclusions

Intracranial schwannomas are benign, slow-growing tumors accounting for 6% to 8% of primary brain tumors. However, the majority has involved vestibular nerve and, less commonly, trigeminal nerve. Schwannomas of the cranial nerves involved with ocular motility are uncommon. Comprehensive radiographic evaluation together with the aid of advanced exquisite imaging technique can provide much more information on accurate diagnosis and microsurgical anatomy regarding the relationship of cranial nerves and microvasculature. Although MRI findings in the present case was considered consistent with schwannoma. In such cases, with no invasion of the cavernous sinus, radical tumor resection with preservation of the abducens nerve can be performed via a simple suboccipital retrosigmoid approach. Abducens schwannoma, although rare, should be taken into account for differential diagnosis of the cerebellopontine angle tumors.

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Case report: Gliosarcoma in patient with Sjogren syndrome

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Background and aims

We describe a patient with Sjogren syndrome with rapidly progressive dementia due to gliosarcoma.

Methods

Female, 48 years old, presented with a memory dysfunction for 6 months and getting worse over time. The patient had complained about extreme fatigue, xerostomia, xerophthalmia, dysphonia, swallowing difficulty and diagnosed with Sjogren Syndrome for 3 years. She was then diagnosed with Rapid Progressive dementia and underwent MRI. The first MRI in September 2020 showed a hyperintense lesion in T2 and FLAIR along bilateral lateral periventricular, and contrast-enhanced diffuse nodules lesion in the left frontal lobe concluded as a demyelinating process. The second MRI in 2020 November 2020 showed a multiple solid-cystic lesion, with contrast enhancement on the solid part in cortical and subcortical of the bilateral frontal lobe, corpus callosum, and insulae. The lesions showed increased perfusion in CBV and CBF.

Results

Surgery was taken to resect the mass, and the pathology reveals the mass as gliosarcoma, WHO grade IV. Temozolomide 120 mg was given for 5 days and radiotherapy was given 8 times out of plan 33 times and was discontinued because of severe thrombocytopenia dan cardiomyopathy.

Conclusions

Gliosarcoma is a rare variant of a primary tumor of the central nervous system which very rarely shows rapid progressive dementia as an early clinical manifestation. In Sjogren's syndrome, cognitive dysfunction can be also founded in some cases. This patient initially showed an MRI image that resembled a demyelinated lesion which was probably related to her Sjogren's syndrome which was later found to be a malignancy.

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A case of stroke as the first presentation of underlying prostatic malignancy

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Background and aims

Both ischemic and hemorrhagic stroke are well-recognized as complications of cancer and may be its initial manifestation. Pancreas, gallbladder, stomach, colon and gynaecological malignancies have all been associated with stroke.

Methods

We present ischemic stroke as the initial manifestation of prostatic cancer.

Results

A 62-year-old male with no medical history was admitted to our department after sudden onset left hemiplegia. Initial examination showed dysarthria, left homonymous hemianopia, left hemiplegia and purpuric skin lesions on his trunk and extremities. MRI brain demonstrated infract in the territory of the right middle cerebral artery. The etiological investigations: a cardiac ultrasound, 24 h ECG Holter and CT angiography of supra-aortic trunks showed no etiology. Laboratory investigations were suggestive of disseminated intravascular coagulation. CT abdomen and pelvis demonstrated enlarged heterogeneous prostate. Prostate specific antigen was raised more than 10,00,000 ng/ml. A bone radionuclide imaging showed extensive metastasis. Prostate biopsy revealed an adenocarcinoma. The patient presented severe anemia and thrombopenia with hemorrhagic complication. He was initially treated by blood transfusion, then he was referred to oncology department to start hormonotherapy.

Conclusions

Physicians should consider an underlying cancer as a potential explanation for a cryptogenic ischemic stroke particularly if the stroke is associated with abnormal blood studies. Authors recommended that etiological investigations should include a thoracic, abdominal and pelvic CT-Scan. Many mechanisms may explain the relation between ischemic stroke and active cancer as the disseminated intravascular coagulation, non-bacterial thrombotic endocarditis, secondary infections or direct tumor invasion. Early detection of underlying malignancy remains an essential driver of improved prognosis.

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118450

Correlation of neutrophils lymphocyte ratio with functional outcome in intracranial tumour

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Background and aims

Intracranial tumors are one of the causes of high rates of morbidity and mortality in neurology patients. Currently required laboratory markers can be used and correlated with functional outcome. Neutrophils Lymphocyte Ratio (NLR) is a inflammation marker used as a parameters of prognosis in various tumours. Increased of NLR have been known before its significant relationship with immediate survival rate in intracranial tumour by functional outcome. This study want to determine the correlation of neutrophils lymphocyte ratio with functional outcome in intracranial tumour

Methods

This study uses a cross sectional design. Sampling was conducted at Adam Malik General Hospital Medan. Samples were taken as many as 40 subjects consecutively. Blood laboratory and functional outcome were checked on days 1 and day 12. Data analysis used the spearman test and pearson correlation test

Results

Results of the study: Demographic characteristics of the study subjects were an average age 40–59 years, females 60% and 40% males, high school education level, housewife occupation. As many as 52.5% were primary brain tumors and 47.5% were metastatic brain tumors. There was significant relationship between NLR with NANO score in intracranial tumour for day 1 ($p = 0.001$, $r = 0.646$) and days 12 ($p = 0.001$, $r = 0.656$). There was significant relationship between NLR with KPS in intracranial tumour for day 1($p = 0.001$, $r = -0.617$) and day 12 ($p = 0.003$, $r = -0.451$)