changes in patient management can be seen, e.g. the use of pre- and post-operative MRI, and surgical activity with regard to age and type of surgery. Survival for glioma patients has continuously increased during the time period.

CONCLUSION: The national brain tumor registry allows for nationwide follow-up of management and treatment of all patients with primary brain tumors. Differences in treatment strategy between regions can be discovered, discussed and adjusted thereby ensuring nationwide high quality and fair management. Data from the registry will be presented.

P02.03 MULTIPLE SCLEROSIS AND GLIOMAS - A COINCIDENCE?

K. Ochs1,2, D. Cappeer3, E. Sahn4, D. T. E. Jones3, D. Schrimpf3,4, A. von Deimling1,4, W. Wick1,4, M. Platten1,2
1Neurology Clinic and National Center for Tumor Diseases, University Hospital Heidelberg, Heidelberg, Germany, 2Department of Neuropathology, University Hospital Heidelberg, Heidelberg, Germany, 3Department of Neuropathology, University Hospital Heidelberg, Heidelberg, Germany, 4CCU Neuropathology, German Cancer Research Center, Heidelberg, Germany.

BACKGROUND: The coincidence of multiple sclerosis (MS) and primary brain tumors is a rare but well documented event. So far, little is known about a possible molecular link between chronic CNS inflammation or long-term immunomodulatory treatment and tumor development. On the other hand, in gliomas and other tumor-specific treatments such as radio- or chemotherapy on MS course is widely unknown.

RESULTS: We analyzed clinical data of 23 patients suffering from MS and malignant brain tumors. Moreover, genome-wide methylation patterns of 12 glioma patients with an additional MS diagnosis were assessed and compared with age- and sex-matched controls without MS.

RESULTS: In the majority of cases (81%) MS diagnosis was prior to tumor diagnosis. All patients (100%) had a relapsing-remitting MS course and around 3/4 of patients (76%) received an overall immunomodulatory treatment. While IDH1 R132H-mutated astrocytomas (n=9) were incidental MRI findings in more than one half of the cases (67%), all gliobastomas (n=8) were manifested by new clinical symptoms. However, in 2/5 of patients these symptoms were initially misinterpreted as MS-related. Regarding tumor treatment, 2 out of 4 patients with IDH1 R132H-mutated astrocytomas showed a progression in MS disease activity within 12 month after radiotherapy whereas chemotherapy did not seem to trigger MS episodes.

CONCLUSION: Despite the rarity, unusual MRI findings or neurologically in MS patients should be recognized as possible coincident brain tumors. For patients with low-grade gliomas, continuation of immunomodulatory treatment should be considered particularly during radiotherapy.

P02.04 PATTERN OF CARE AND COST OF DISEASE IN A POPULATION OF 429 BRAIN TUMORS

A. Paci1, A. Mastromattei2, V. Fano2, V. Villani3, M. Cerrone2
1National Cancer Institute Regina Elena, Rome, Italy, 2ASL RM 2, Rome, Italy.

BACKGROUND: Brain tumors account for <2% of all primary neoplasms but because the morbidity and mortality they are responsible for represents a great economic impact. Improving clinical outcomes not only requires the development and application of more effective treatment but also better organisation of continuity of care between hospital and district health services. Patients with brain cancer have often experienced a fragmented and uncoordinated pathway of care from diagnosis through to treatment and at the end of life stage. The optimal management of BT patients requires establishing direct referral pathways, multidisciplinary teams, and early provision of supportive and palliative care to determine appropriate treatment during all the trajectory of disease and at the end of life. Methods: The aim of our study was to assess the Health System expenditures related to Hospital admissions, Emergency room accesses, Rehabilitation inpatient and outpatient interventions and drugs costs in a population of newly diagnosed BT patients. Patients were identified from the local Health System and hospital databases among BT patients resident in the Rome city area of Azienda Sanitaria Locale (ASL) RM C, one of the largest local health area in Rome with an estimated population of over 500,000 people. Database was queried for ICD-9 codes 191, for the period 2010–2014 to obtain the study sample. Cost analysis was analyzed in the whole population for the entire period and a sub-analysis was performed in the last 6 months of life. Results: 429 newly diagnosed primary brain tumors patients were included in this study. Mean age wa 61 y; 238 were female and 191 male. Mean follow-up was 1.4 y. 245 patients died during the period of observation. The median cost for patients resulted of 21,807 Euros being 50% of the cost due to hospital readmissions. In the last 6 months of life the cost for hospital stay increase to 70% of the total treatment. In a subgroup of patients assisted at home by a neurooncology home palliative care team the overall cost and the lenght of hospital stay resulted significantly lower. Conclusions: the optimal management of BT patients requires adaptation of pathways of care based on integration between multidisciplinary teams and with district services. The goal is to provide good quality of care during all the trajectory of disease, to deliver early palliative and supportive care and to reduce the cost of inpatient stay.

P02.05 PERIPHERAL NERVE SHEATH TUMOR EPIDEMIOLOGY IN THE SOUTH CENTRAL HOSPITAL OF HIGH SPECIALITY FROM PEMEX IN MEXICO

A. Guerra Mora1, M. Cordoba Mosqueda1, R. Hernandez Resendiz1, I. Loya Aguilar2, R. Viciuca Gonzalez1, U. Garcia Gonzalez1

1Hospital Central Sur de Alta Especialidad PEMEX, Mexico, Mexico, 2Universidad La Salle, Mexico, Mexico.

INTRODUCTION: The peripheral sheath tumors are part of a large group of neoplasms that range from biologically benign with minimal disorders in life quality to highly malign with life quality deterioration and mortality. There are subtypes with high prevalence like Schwannomas and some much rarer like the intracranial peripheral nerve sheath tumor which happen to have very bad prognosis. The aim of this study is to describe the epidemiologic and clinical characteristics of patients with peripheral nerve sheath tumors in a hospital of high speciality.

METHOD AND MATERIALS: Observational study with patients from March 1999 to March 2016 with confirmed diagnosis of peripheral nerve sheath tumor. Data was recorded in the electronic files of the South Central Hospital of High Specialty PEMEX. A statistical analysis is made through the SPSS Statistics of the disease in this Institution program.

RESULTS: There were 84 patients with the diagnosis of peripheral nerve sheath tumor with a median age of 48.04 years, 65.5% were males, the most common histological type found was the Schwannoma with a 72.6%, followed by senescent Schwannoma 13.1%, neurofibroma 8.3%, and malign peripheral nerve sheath tumor 2.4%. The most frequent location was at the site of cranial nerves, followed by cervical level 27.4%, lumbar 16.7% and thoracic 9.5%. The most common initial symptom was pain in 23.8% of the patients, and the time of the onset of symptoms to the diagnosis was 31.6 months. From the total of patients 83% had neurofibromatosis type 1, 6.0% neurofibromatosis type 2.

CONCLUSIONS: We realized in our series of reported cases that the frequency is similar to those reported in worldwide population; nevertheless the time between the onset of symptoms and the diagnosis is much higher in our cases as well as the population of patients with neurofibromatosis. This study identifies the need of an adequate diagnosis and treatment pattern of this disease in order to have a good quality of life in the shortest time possible.

P03 QUALITY OF LIFE

P03.01 EVALUATION OF THE RELEVANCE OF AN INSTRUMENTAL ACTIVITIES OF DAILY LIVING (IADL) QUESTIONNAIRE DEVELOPED FOR DEMENTIA PATIENTS IN GLIOMA PATIENTS

Q. Oort1, L. Dirven1, W. Meijer1, S. A. M. Sikkens1, B. M. J. Wijnhoven1, J. C. Reijneveld1, M. J. B. Taphoorn1

1VU University Medical Center, Amsterdam, Netherlands, 2Leiden University Medical Center, Leiden, Netherlands, 3Medical Center Haaglanden, Den Haag, Netherlands.

BACKGROUND: Obtaining information on everyday functioning of glioma patients is essential. Instrumental Activities of Daily Living (IADL) are cognitively complex daily activities, such as food preparation and shopping. IADL may be negatively influenced by cognitive decline, characteristic for glioma patients. There is no gold standard to measure IADL in glioma patients. However, both dementia and glioma patients exhibit cognitive decline during the course of their disease and might experience similar problems with IADL.

OBJECTIVE: To evaluate if the Amsterdam IADL questionnaire (A-IADL-Q), a 70 item questionnaire developed and validated to measure IADL in elderly dementia patients, is also relevant for glioma patients.

METHODS: The evaluation consisted of 3 steps. In the first step, 6 neuro-oncology health care professionals (HCP) and 10 glioma patient-proxy dyads were asked to evaluate the A-IADL-Q items. HCPs had to indicate if