malignant glioma. One case of malignant ependymoma and one case of medulloblastoma showed rapid aggravation of symptom after convulsion.

**DISCUSSION:** Nine cases showed convulsion among our 41 cases. Convulsion happened as initial symptom in 4 cases but it happened during treatment in 5 cases. Three cases among these 5 cases showed rapid aggravation of symptom after convulsion. So pre- and post-operative anti-epileptic treatment seems to be necessary.

**COT-02**

**TREATMENT EXPERIENCE OF PAZOPANIB FOR A CASE OF VON-HIEPP LINDAU DISEASE**

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**INTRODUCTION:** von Hippel-Lindau (VHL) disease is an autosomal dominant genetic disorder associated with neoplastic lesions in multiple organs. Here, we report our experience with a patient with VHL disease presenting with complications of renal tumors, wherein pancreatic cystic lesions and renal neoplastic lesions were reduced in size with the administration of pazopanib at our department. **PATIENT:** The patient was a 26-year-old man who presented with hiccups and was diagnosed with medullary hemangioblastoma with a cyst that was resected. The other central nervous system lesions were located in the right optic nerve sheath, cisternal area, thoracic spinal cord, with multiple different type tumors in the pancreas, renal tumors, and epididymal tumors. Although the family history was unclear, the clinical diagnostic criteria for VHL disease were met, and mutations were found in the VHL gene analysis. Six months after the initiation of pazopanib therapy at a dose of 800 mg/day, there was no remarkable change in the hemangioblastoma on imaging; however, the pancreatic and renal lesions had shrunk. In addition, new lesions did not appear. Adverse events included diarrhea, graying of hair, and dyspepsia. **DISCUSSION:** Pazopanib is a multi-tyrosine kinase inhibitor that inhibits angiogenesis and inhibits tumor growth. In VHL disease, pancreatic and renal tumors influence the survival prognosis, and for hemangioblastomas, the lesions increase in number and size and the corresponding surgery affects the functional prognosis. Although there was a poor tumor-reduction effect on the hemangioblastoma, there was a supposed inhibitory effect on the appearance of new lesions and the enlargement of the existing lesions. **CONCLUSION:** Pazopanib administration resulted in the shrinkage or regression of pancreatic and renal lesions. In addition, it inhibited the increase in number and size of hemangioblastomas. Further, prolonging the surgical treatment interval may help maintain the patient’s quality of life.

**COT-03**

**EVALUATING FUNCTIONING AND DISABILITY OF A PATIENT WITH BRAIN TUMOR BY WHODAS**

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**BACKGROUND:** The WHO Disability Assessment Schedule (WHODAS) is a practical assessment instrument which measures level of functioning in the following six domains of life. Here we report a case of brain tumor who was evaluated with the 36-item full version of WHODAS 2.0 (self-administered mode), and discuss usefulness of the WHODAS. **CASE PRESENTATION:** A 69-year-old man was referred to our hospital with cognitive problems because of which he needed assistance for his ADLs at home. He was diagnosed as having primary central nervous system lymphoma (PCNSL) following open brain biopsy, and was transferred to our hospital for chemotherapy at 23 days after the biopsy. He showed no sign of motor or sensory abnormalities, but initial evaluation revealed that he had troubles in judgment in his ADLs mainly because of marked memory deficits. Motor, cognitive and total FIM score was 65/91, 22/35, and 87/126, respectively and MMSE score was 24/30. After 48 days of chemotherapy (3 courses of initial DeVIC and following R-MPV regimens), he was temporally discharged home before readmission for another chemotherapy. According to the family, he was then basically independent in ADLs at home. We implemented WHODAS 2.0 to demonstrate minute ADL problems of this patient at home so that we might focus on rehabilitation for specific problem at home. The scores of WHODAS were 15/20 for Communication, 10/20 for Mobility, 4/20 for Self-care, 14/25 for Getting along, 12/20 for Life activities, and 27/40 for participation. In fact, he felt difficulty in the areas of “activity and participation”. **DISCUSSION:** The WHODAS is useful to identify various problems in their daily living even though patients were independent in ADLs. Patients with brain tumors often repeat hospitalization for medical treatment. We have to be alert to not only objective but subjective changes in ADLs at home.

**COT-04**

**FAMILY SUPPORT FOR PATIENTS WITH PRIMARY MALIGNANT BRAIN TUMORS BY PATIENT SUPPORT GROUP IN NATIONAL CANCER CENTER**

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**BACKGROUND:** A family support group for patients with primary malignant brain tumors in our hospital is called “Brain Tumor Family Table.” We conduct regular meetings, such as 30 minutes of medical lectures and 60 minutes of healthcare discussions, between patients and medical staff which is supervised by a nurse. To provide more effective family support, we reported theUtility of the Family Table of patients with Brain Tumor in terms of the number of family members who participated in 11 meetings from July 2015 to March 2019 and answered anonymous questionnaires about their participation. This survey evaluated their motivation for participation and the level of satisfaction toward the lectures and discussions by three-level scores and free description. **RESULT:** Regarding the reason of their participation, 28.1% of the participants answered, “I want to talk to someone who is in the same condition.” We found that 83.3% of them were satisfied with the lectures, and 89.6% of them were satisfied with the discussions and conversations. The reasons for their satisfaction were: “I was happy to hear the story of other patients” (19.0%), “I feel positive toward patient care” (19.0%), and “I realized I was not alone” (17.2%). Moreover, 92.7% answered “I would like to participate in the next meeting.” Among them, 26.1% answered “I want to talk again,” 14.2% answered “I feel stable,” and 14.2% answered “I can get information.” There were other opinions, like “Sharing feelings is important” and “I would like to help others next time,” as well. **DISCUSSION:** Malignant brain tumors are orphan cancers, and patients and their families lack the information about the disease and the chance to share their experiences. Hence, participants were quite satisfied with this meeting. We will improve our facilitating skills as an organizing body so that participants can share their experiences and feelings to reduce their loneliness and finally feel positive toward patient care.

**COT-05**

**A CASE OF NEPALESE IN JAPAN SUSPECTED OF NEUROCYSTICERCOSIS**

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**INTRODUCTION:** Cystosis is the most common parasitic disease of the central nervous system. Especially in developing countries, it is one of the differential diagnoses of diseases that cause seizures. We report a case of a foreigner suspected of having neurocysticercosis. Case: A 36-year-old Nepalese visiting Japan for 2 years. Two days ago, she lost consciousness for a few seconds and was transferred to our hospital complaint of convolution for about 1 minute. Head Computed Tomography (CT) revealed a mass lesion with a ring enhancement effect of about 10 mm in the right frontal lobe, with edema around it. Magnetic Resonance Imaging (MRI) shows T1WI low signal, T2WI high signal, and diffusion-weighted image with a light high signal. The ring-shaped enhancement effect was exhibited. Whole body CT showed no obvious lesions and blood tumor markers were negative. Various infections were negative, and cerebrospinal fluid cytology and culture were negative. **POSTOPERATIVE COURSE:** From the surgical findings, brain abscesses such as cerebral tuberculoma were suspected, but various tests were negative. As a pathological result, the tumor had a capsule, and the inside showed necrotic tissue and fibrous granulation tissue reaction. There were no insects, and no obvious cells were identified by special staining. From the origin area, symptoms, and pathological findings, neurocysticercosis was most suspected. **CONCLUSION:** We experienced a case of suspected neurocysticercosis that was difficult to diagnose from images and pathological findings. In neurocysticercosis, when the worm dies, contrast-enhanced MRI shows a ring-like enhancement effect, and it is accompanied by surrounding edema, which may require differentiation from brain tumors.

**COT-06**

**HBV REACTIVATION DURING AND AFTER THE TREATMENT OF MALIGNANT GLIOMA WITH TEMOZOLOMIDE**

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**BACKGROUND:** It has been reported that temozolomide treatment for malignant glioma can lead to the reactivation of Hepatitis B virus (HBV)
and fulminant hepatitis. However, the frequency of HBV reactivation and the preventative effect of entecavir remains unclear. In this study, we retrospectively reviewed clinical features of the cases treated by temozolomide for malignant glioma, focusing on the reactivation of HBV and the effect of entecavir. METHODS: We screened 129 cases with newly diagnosed and recurrent malignant glioma for HBs antigen, HBs antibody and HBe antibody before the administration of temozolomide. HBV-DNA were quantified by real time PCR. HBV carrier and those with occult HBV-DNA were monitored every 1–3 months by real-time PCR during temozolomide treatment and 12 months after completion of temozolomide. Entecavir were started before temozolomide treatment to the HB carrier, and it was started 3 months after detectable at follow-up to the cases with occult HBV infection. Results 2 (1.5%) and 20 (15%) of 129 cases were HBV carrier and had occult HBV infection, respectively. HBV-DNA in both of HB carrier turned negative after administration of entecavir, but transiently turned positive again during temozolomide treatment. In the cases with occult HBV infection, 4 (20%) patients had HBV reactivation. HBV-DNA turned negative after starting entecavir without liver dysfunction. CONCLUSION: HBV carrier and the cases with occult HBV infection were not rare in Japan, and HBV reactivation developed frequently during temozolomide treatment. Because pharmacological prevention of HBV reactivation with entecavir was effective, the screening and monitoring is indispensable in the treatment of malignant glioma with temozolomide.

COT-07
HEREDITARY BRAIN TUMOR DISEASE MEDICINE IN THE CANCER GENOME MEDICAL AGE: IMPORTANCE OF MULTIDISCIPLINARY COLLABORATION AND GENETIC COUNSELING
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INTRODUCTION: Recently, the cancer genome medical system has been rapidly promoted in Japan, such as cancer related gene panel test as NCC oncpanel and Fondation One being covered by insurance. At Tokyo Hospital, we have developed an in-hospital medical care system specifically for VHL disease. The University of Tokyo Hospital has been developing an in-hospital medical care system for VHL disease and TSC. [VHL disease] If VHL disease is diagnosed at an early stage and strives for early detection and treatment of tumor, it is said that the prognosis is not largely different from normal people. Therefore, our hospital opened a specialized outpatient for VHL disease from 2012, and has carried out genetic diagnosis of VHL disease and medical treatment based on it. [TSC] Recently, the use of Afinitor for SEGA was covered by insurance in Japan, and a system in which multiple departments involved in our hospital cooperated was established, and regular meetings were held to determine treatment policies. DISCUSSION: It was the development of genetic counseling system and multidisciplinary cooperation system that was important in this case. Genetic counseling helps patients with illness and their families to genetically understand and adapt to illness. In the case of hereditary diseases, the practice of genetic counseling was very useful. In addition, since it is a disease involving multiple organs, close cooperation with other in-hospital clinics has been extremely useful for early detection and treatment of patient’s lesions.

COT-11
EFFECT OF PHYSICIAN SUPPORTS ON QUALITY CONTROL AND QUALITY ASSURANCE IN CLINICAL BRAIN TUMOR RESEARCH
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BACKGROUND: Clinical physicians have difficulties in conducting investigator-initiated trials because of increasing clinical duties in Japan. Therefore, physician support can be one of the important factors for quality control and quality assurance. In Kyoto University Hospital, clinical research professional’s support for physician had started at November 2012. In this study, we evaluate effect of physician supports on quality control and quality assurance in clinical brain tumor research. METHODS: Our department in Neurosurgery has been a member of Group in Japan Clinical Oncology Group (JOCG) since 2007. The number of regis- tered patients, the status of periodic monitoring, the occurrence of inquiries per case, and details of physicians’ support (items, frequency, methods, etc.) in each case were investigated. The JOCG and KUH made the audit results conducted by JOCG Audit Committee on January 2013 and February 2019 are examined. RESULTS: There are seven trials have been ongoing on or started since November 2012. There are fifty patients registered in the clinical studies until July 2019. Periodic monitoring has been carried out in 214 patients for cumulative total number since 2012. Physicians’ support mainly involved the preparation of ethical review documents, CRF documentation, responses to data queries, preparation of SAE reports, study schedule check and monitoring of observation items. The audit results of site visit were ac- cordingly evaluated as excellent. The total evaluation score 68.80 on January 2013 and excellent, total evaluation score 99.9 on February 2019. CONCLUSION: Clinical Trials Act has been implemented, and further improvement in the quality of clinical trials has been demanded. As the results of this study, we clarified the necessity for physician support and the contribution to quality improvement.