sults were managed using Endnote. Two independent reviewers assessed the eligibility of the publications using Rayyan, conflicts were evaluated by a third reviewer. Included articles were extracted by one reviewer and confirmed by a second reviewer. Risk of bias assessments were conducted using Hoy et al's risk of bias tool. Results were synthesized using "metaprop" in R. The meta-analysis was carried out in R which produced forest plots. RESULTS: Our cohort included 182 studies with a total of 13669 adult and paediatric glioma patients classified diagnostically according to WHO guidelines. Among 48 glioma entities, BRAF V600 was identified most commonly in epithelioid glioblastoma with a prevalence of 69% (95% confidence interval (CI): 45-89%), followed by pleomorphic xanthoastrocytoma with a prevalence of 56% (95% CI: 48-64%), anaplastic pleomorphic xanthoastrocytoma with a prevalence of 38% (95% CI: 23-54%), ganglioglioma with a prevalence of 40% (95% CI: 33-46%), and anaplastic ganglioglioma with a prevalence of 46% (95% CI: 18-76%). Other glioma entities were found to have a prevalence of BRAF V600, these include astroblastoma (24%), desmoplastic infantile astrocytoma (16%), subependymal giant cell astrocytoma (8%), dysembryoplastic neuroepithelial tumour (3%), diffuse astrocytoma (3%), and pilocytic astrocytoma (3%). CONCLUSION: To our knowledge, this is the largest systematic review examining the prevalence of BRAF V600 in adult and paediatric glioma classified according to diagnostic WHO criteria. However, there were some limitations in this review. The sample sizes of some studies were very small, and the method of mutational analysis for BRAF V600 varied between papers. We found BRAF V600 in a significant prevalence of epithelioid glioblastoma, pleomorphic xanthoastrocytoma, anaplastic pleomorphic xanthoastrocytoma, ganglioglioma, and anaplastic ganglioglioma. Of interest, BRAF V600 mutation was found in a lower prevalence of astroblastoma, desmoplastic infantile astrocytoma, subependymal giant cell astrocytoma, dysembryoplastic neuroepithelial tumour, diffuse astrocytoma, and pilocytic astrocytoma. Consideration of assessment of BRAF V600 mutation may enable further treatment options with BRAF and/or MEK inhibitors in these particular diagnostic entities.

TELEPHONE VERSUS FACE-TO-FACE NEURO-ONCOLOGY CONSULTATIONS: COMPARING PATIENT SATISFACTION, CONVENIENCE, FAMILY SUPPORT AND CLINICIAN ATTITUDE DURING THE COVID-19 PANDEMIC

Ms. Emma Toman[1], Mrs. Claire Goddard[1], Mr. William Garratt[1], Mr. Frederick Berki[1], Ms. Zenab Sher[1], Ms. Teresa Scott[1], Mr. Andrew Stevens[1], Mr. Vladimir Petrik[1], Mr. Ismail Ughratdar[2], Mrs. Anwen White[1], Mr. Athanasios Zisakis[1], Prof. Colin Watts[1,2], Dr. Victoria Wykes[1,2]; [1]Queen Elizabeth Hospital Birmingham, [2]University of Birmingham

AIMS: During the first wave of the COVID-19 pandemic, to limit the number of patients attending hospital, the neuro-oncology department selected a large number of appointments to be conducted via the telephone. This project aimed to determine how patients and clinicians perceived telephone consultations in the neuro-oncology service compared to traditional face to face appointments. METHOD: A 20-question patient satisfaction survey combined quantitative and qualitative questions and was distributed between June and August 2020. These were distributed by email to 88 patients who attended neuro-oncology clinic in person ("face-to-face"), or by telephone. Concurrently, a 15-question survey was distributed to all clinicians conducting telephone and face-to-face consultations for the neuro-oncology service. Questions included in the clinician survey were designed to mirror the patient satisfaction questionnaire where possible. Fisher's exact test was used to determine significance, which was set at $p< 0.05$. RESULTS: 51.1% (n=45) of patients returned the questionnaire. Of those who received telephone appointments, 89.5% (n=17) felt the consultation was convenient, 94.7% (n=18) were satisfied and 80.0% (n=16) were able to have a family member/friend present. Of those who attended face-to-face appointments, 96.0% (n=24) felt their consultation was convenient, 100% (n=25) were satisfied and 87.5% (n=21) were able to have a family member/friend present. There was no significant difference in patient convenience, satisfaction or family/friend presence ($p=0.395$, $p=0.432$ and $p=0.498$ respectively) between face-to-face and telephone clinics. Overall, the clinicians reported undertaking a mean of 9.5 telephone consultations per week. Only 42.8% (n=3) use telephone appointments for first-time neuro-oncology consultations, whereas 100.0% (n=7) use them for results and follow-up appointments. Only 51.7% (n=4) felt that undertaking telephone consultations is convenient and 42.8% (n=3) have experienced difficult situations with patients during telephone consultation. CONCLUSION: This project suggests that neuro-oncology telephone consultations provide patients with the same level of satisfaction and convenience as face-to-face appointments. We have also demonstrated that using the telephone does not provide a significant barrier to having family or friends present to support the patient. We have shown that clinicians are universally utilising neuro-oncology telephone appointments for follow-up and results whereas much fewer use the telephone for performing initial consultations. Given the high-level of satisfaction demonstrated in the patient questionnaires this reflects effective patient-selection for remote consultations. The COVID-19 pandemic has forced oncology services to evolve and results of this project suggest that telephone neuro-oncology consultations are widely accepted by patients and clinicians. We therefore propose that remote consultations should continue beyond the pandemic in select cases.

BRAIN TUMOUR RELATED EPILEPSY WITH CO-EXISTING NON EPILEPTIC ATTACKS: CHARACTERISTICS OF A CLINICALLY CHALLENGING COHORT

Dr. Shanika Samarasekera, Dr. Di Liang; Queen Elizabeth Hospital Birmingham

AIMS: The co-existence of non-epileptic attacks (NEAD) in patients with brain tumour related epilepsy (BTRE) is poorly described. Non epileptic attacks (NEAD) co-occur in up to 30% of patients with epilepsy PWE. Adverse life events are associated with development of NEAD; their co-occurrence in those with BTRE is potentially un-surprising. We sought to characterise the evolution of symptoms in this cohort. METHOD: Clinical trajectories of patients with BTRE and co-existing NEAD were characterised. The diagnosis of NEAD was based on the epilepsy specialist's observation of attacks and /or capture of attacks on video. Some patients had additional video EEG correlate. Patients had been referred because of persisting symptoms in spite of escalating antiepileptic therapy. RESULTS: Of eight patients, six were initially misdiagnosed with escalating seizures. One patient developed NEAD de novo following tumour biopsy, the remaining patients developed NEAD following onset of BTRE. Onset of NEAD was not temporally linked with the diagnosis of a brain tumour. In five patients, NEAD onset occurred when seizures were controlled (< 1 seizure/ month). All patients reported fear of developing uncontrolled seizures as being associated with their symptoms and identified their NEAD as more disabling than their epilepsy. Patients were eventually managed with polytherapy -two found adjunctive clobazam helpful and four were offered antidepressant/ anxiolytic medication. Behavourial strategies including mindfulness were also discussed. At time of last follow up, seven patients had on-going NEAD symptoms in spite of good seizure control. CONCLUSION: NEAD can co-occur with BTRE and should be considered in those with rapidly escalating symptoms in spite of antiepileptic therapy and radiologically stable lesions. Both making the diagnosis of NEAD and providing ongoing support is challenging. These patients require a multidisciplinary approach with support from allied specialties including neuropsychiatry and neuropsychology.

EFFICACY AND SAFETY OF CYBERKNIFE STEREOTACTIC RADIOSURGERY IN ACROMEGALY

Dr. Desiree Seguna[1], Dr. Scott Akker[1], Dr. James Ahlquist[2], Dr. Aparna Pal[3], Dr. Antonia Brooke[4], Dr. Rachel Lewis[1], Dr. PN Plowman[1], Dr. Jane Evanson[1], Ms. Pratistha Panday[5], Prof. William Martyn Drake[1]; [1]St Bartholomew's Hospital, [2]Southend University Hospital, [3]The Churchill Hospital, Oxford, [4]Royal Devon and Exeter Hospital, [5]Queen Mary

AIMS: Objective: Active acromegaly is associated with increased mortality. While surgery is the mainstay of treatment, it is not always curative. In selected cases, CyberKnife stereotactic radiosurgery (CK SRS) can be used as adjuvant treatment in patients with persistent disease. METHOD: Methodology: Biochemical response was measured using serum IGF-1 levels, calculated as a percentage of the upper limit of normal (% ULN). Levels were recorded prior to treatment, at 6-12 months post-treatment and at the most recent follow-up. Anterior pituitary hormone deficits were assessed before and after treatment. Tumour size was followed-up using MRI. RESULTS: 10 patients (7 male, mean age 36 yrs [+/- 12.6, SD]) with acromegaly were treated with CK SRS. 9 were treated following failure to attain biochemical remission with TSS. 1 had primary CK SRS. 2 had previous conventional fractionated external beam radiotherapy. Median tumour diameter was 6 mm (IQR 5.2-10.5 mm), with cavernous sinus invasion in 2 cases. The dose was 20-24Gy/1#. 4 patients were on dopamine agonist, 4 on somatostatin analogue and 2 on pegvisomant. Mean follow-up 31.6 months (+/- 13.5 months, SD). Median IGF-1 % ULN was 146% pre-treatment (IQR 126.5-208.5), 109% at 6-12 months (IQR 76.5-131%) and 71% (IQR 59-91%) at last follow-up. Mean radiological follow-up 16.6 months (+/- 15.9 months, SD). No cases showed tumour enlargement. One patient developed secondary hypothyroidism. Side-effects: headache (7 patients), blurred vision (1 patient), fatigue/nausea (1 patient). No new visual fields defects, cranial nerve palsies, cerebrovascular events or secondary tumours. CONCLUSION: Conclusions: CK SRS appears safe and effective in selected patients with acromegaly, when there is failure to attain biochemical cure with surgery and in patients intolerant or resistant to medical treatment.

CRANIAL MENINGIOMAS REQUIRING CRANIOPLASTY

Mr. Max Norrington[1], Mr. Christopher Millward[2], Dr. John Doherty[1], Mr. Mohammad Mustafa[1], Dr. Thomas Humphries[1],