**Aim**: The introduction of daily Board Rounds in the Neurosurgical Department at Southmead Hospital, Bristol using the Six Sigma approach. **Methods**: Board Rounds were run early morning prior to formal ward rounds to highlight key issues early. Two standardised questionnaires (TeamSTEPPS Teamwork Perceptions and GRPI Team Assessment Questionnaires) were used to measure staff perceptions of the team before and after Board Rounds. VTE fill rates before and after Board Rounds were accessed on the hospital intranet database.

**Results**: The mean Board Round duration was 25 minutes (StdDev = 5.1) over 6 weeks. VTE form fill rate went from 79.1% in August to 91.11% in December when Board Rounds had been running for at least 2 months. The TeamSTEPPS questionnaire showed significant improvements in scores (p < 0.001 in 4/5 categories and p < 0.005 in 1/5 categories). The GRPI questionnaire also showed significant improvements in scores (p < 0.005).

**Conclusion**: Board Rounds can act as an effective and time-efficient tool to improve two key aspects of the modern hospital environment - patient safety and team-working. This is demonstrated by improved VTE fill rates and improved teamwork scores on both questionnaires. Planned future improvements include trying to assist more key allied healthcare professionals (e.g. pharmacists) to attend regularly.

#### 0629: LONG-TERM SURGICAL OUTCOMES FOR REFRACTORY EPILEPSY

M. Mohan <sup>1,\*</sup>, S. Keller <sup>2</sup>, U. Wieshmann <sup>3</sup>. <sup>1</sup> University of Liverpool, UK; <sup>2</sup> Aintree University Hospital and The Walton Centre NHS Foundation Trust, UK; <sup>3</sup> The Walton Centre NHS Foundation Trust, UK

**Aim**: To determine the relationship between post-operative seizure status in patients with medically refractory epilepsy, with respect to the type of operation. A secondary aim was to establish the seizure status of patients who attended epilepsy surgery clinic however were rejected or did not commence to surgery.

**Methods**: A retrospective review of clinic letters that was available on the computer database at the Walton Centre NHS Foundation Trust, Liverpool. Kaplan-Meier survival analysis, log rank and fisher's exact test was performed.

**Results**: 133 operated patients and 142 non-operated patients were available for the study. Operation type did not have an affect on seizure freedom (log rank test; p=0.063). Operated patients had higher seizure freedom rates (27.8%) compared to patients who were rejected or did not commence with surgery (4.93%) (fisher's exact test; p=0.0001).

**Conclusion**: Operation type does not influence post-operative seizure freedom. Epilepsy surgery offers higher seizure freedom rates compared to the cohort of patients who were rejected or did not commence with surgery.

## 0893: META-ANALYSIS COMPARING SUBTHALAMIC AND PALLIDAL DEEP BRAIN STIMULATION FOR PATIENTS WITH PARKINSON'S DISEASE

M. Arnaout <sup>1,\*</sup>, A. Negida <sup>1</sup>, G. El Ashal <sup>2</sup>, S. Fouda <sup>1</sup>, E. Ghanem <sup>3</sup>, S. El Ghonemy <sup>4</sup>. <sup>1</sup> Department of Neurosurgery, Zagazig University, Egypt; <sup>2</sup> Cairo University, Cairo, Egypt; <sup>3</sup> Al Azhar University, Egypt; <sup>4</sup> Al Menoufia University, Egypt

**Aim**: This meta-analysis aims at comparing motor improvement after subthalamic (STN) and pallidal (GPi) deep brain stimulation (DBS) for patients with Parkinson's disease (PD).

**Methods**: We searched PubMed through November,2014 for prospective controlled studies comparing STN DBS and Gpi DBS for PD patients. Changes in UPDRS motor score, activities of daily life, verbal fluency score and levodopa equivalent dose were pooled as standardized mean difference between two groups in a meta-analysis model using RevMan 5.3. **Results**: Nine controlled trials with a total of 497 patients were eligible for this study. The overall effect did not favor either of the two groups in terms of improvement in UPDRS motor score (off medication SMD = -0.11, 95% CI = [-0.30, 0.09] and on medication SMD = 0.04, 95% CI = [-0.31, 0.11]), semantic verbal fluency (SMD = -0.04, 95% CI = [-0.25, 0.16]) and phonemic verbal fluency (SMD = -0.15, 95% CI = [-0.35, 0.06]). The levodopa equivalent

dose was less in patients undergoing STN DBS than GPi DBS (SMD = -0.29, 95% CI = [-0.48, -0.10]).

**Conclusion:** STN DBS allows more reduction in medication than GPi DBS. Subthalmic and Pallidal DBS achieved the same motor improvement in PD patients, so we recommend that choosing surgical target in PD patients should be based on other non-motor outcomes.

# 0966: EFFECTS OF INTRA-OPERATIVE LANGUAGE MAPPING AND SPEECH AND LANGUAGE THERAPY (SALT) ON AWAKE CRANIOTOMY TUMOUR RESECTION: A CASE SERIES

C. Zhang\*, P. Copley, M. McLeod, G. Critchley, S. Bucur. *Hurstwood Park Neurological Centre, UK* 

**Aim**: Language mapping during awake craniotomy is commonly used to guide tumour resection, but there is little description of its outcome. We present a case series of 13 patients who underwent awake craniotomies for glioma resection between 2007 and 2013.

**Methods**: 13 patients were retrospectively analysed, and data collected on patient demographics, tumour type/grade/location, speech and language (SALT) assessments, treatments, and outcomes.

**Results**: Tumours involved mostly the frontal (n=6), temporal (5) and parietal (2) lobes. Majority were primary tumours (8), and WHO Grade 1-2 (8). 4 were astrocytomas, and the remainders were oligodendrogliomas (3), mixed astrocytoma/oligodendroglioma (3), and glioblastomas (3). Preoperative SALT assessment identified word-finding difficulties in 9 patients. Language mapping was negative in 4 patients, and the extent of tumour resection was guided by intra-operative speech disturbances in 7 patients. Post-operatively, 9 patients' speech remained unchanged, 3 developed worsening speech, and 1 had improved speech. There was no difference in intra- or post-operative complications between patients with positive and negative intra-operative speech disturbances.

**Conclusion**: Language mapping is primarily used to guide the extent of low grade glioma resection from eloquent brain areas. From our experience and this case series, this operative approach can reduce speech complication from surgery.

### **Posters: Orthopaedics**

## 0005: MEDIAL PATELLOFEMORAL LIGAMENT RECONSTRUCTION USING SUTURE BUTTON GRAFT FIXATION ON PATELLA

A. Razak\*, P. Surya, S. Hossain. Royal Oldham Hospital, UK

**Aim**: Medial patellofemoral ligament (MPFL) rupture is usually caused by traumatic patella dislocation. MPFL reconstruction involves replacing the ruptured ligament with autograft such as hamstring tendon. There are several types of graft fixation implant that can be used (endobutton, interference screws and transosseous sutures). The aim of our study was to assess the clinical outcome of MPFL reconstruction using Arthrex Retro-Button as suture button fixation on patella.

**Methods**: A retrospective analysis was done on patients who had MPFL reconstruction surgery using autograft hamstring tendon. Two senior knee surgeons performed the operations. The clinical outcome of surgery was determined at subsequent outpatient follow-ups.

**Results**: Between October 2007 and February 2014, a total of 50 patients (mean age of 24 years) underwent 54 MPFL reconstruction surgeries. Majority were females. All patients had Arthrex RetroButton fixation on patella. Nine RetroButtons were eventually removed due to anterior knee pain. The revision rate was 7%. Patella fracture, graft failure, infection and saphenous nerve injury were amongst other complications.

**Conclusion**: Arthrex RetroButton can be used in MPFL reconstruction with good graft fixation on patella. However it can potentially cause anterior knee pain due to its prominence underneath the skin. It can easily be removed if necessary.

0007: LATERAL TROCHANTERIC PAIN FOLLOWING TOTAL HIP ARTHROPLASTY: RADIOGRAPHIC ASSESSMENT OF ALTERED BIOMECHANICS AS A POTENTIAL AETIOLOGY