

**Results:** Patients with TLE showed significantly lower performances on both social, cognition tasks when compared with controls.

**Conclusion:** Patients with TLE are found to be deficient in perceiving other's feelings in social context that may impair daily living.

#### **A0032: Epilepsy and Armed Forces**

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**Objective:** The Objective of this paper is to make civilians aware of problem faced by people with epilepsy in armed forces, from enlistment in the services, during the services, retention in the services, and the discharge from the services.

**Methods:** Having served in armed forces for 24 years first as GDMO and then as a neurologist both in active war and peace time, I am in unique position to present it. Rules and regulations regarding this matter both in Indian army and other armies, such as U.S.A. will be presented.

**Results:** As far as getting into the Indian army is concerned, if a recruit while giving details of his past illness mentions having epilepsy or fits, he automatically gets disqualified to be recruited. Surprisingly, this is not only unique to Indian army, this perhaps to almost all the armies in the world. Even in the U.S.A., although there are many laws now that protect individuals with disabilities, the armed services are not required to follow them. Instead, the military is exempted from the mandates of nondiscrimination imposed by the civil rights laws on the federal government. If during the service individual has an epilepsy rules regarding the retention in the service in the Indian and the U.S.A. army will be discussed. Recently, there has been a change about retention in the service regarding patient with epilepsy. These changes will be highlighted, and consequences will be discussed. Three services have specific problems retaining people with epilepsy, for example, nobody likes to fly in plane with a pilot having epilepsy.

**Conclusion:** In armed forces we need young and fit individuals who are capable of fighting a war/battle in any part of the world under difficult circumstances. "Tooth to tail ration" has to be small and effective.

#### **A0033: Magnetic Source Imaging of Eloquent Cortex: Novel Findings and Implications**

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**Objective:** Aim of this study is to localize eloquent cortex including vision, language, motor, and sensory area using MEG, study the efficacy of MEG in the localization of

eloquent cortex, and to assess the changes in evoked responses due to a lesion in the eloquent cortex.

**Methods:** This study was performed at the department of neurosurgery, NIMHANS, from March 2016 to July 2019. Detailed clinical examination, multimodal evoked fields, and magnetic source imaging were recorded and analyzed. Patient underwent surgery and data obtained were correlated. Statistical analysis was performed using SPSS 2.0 and R statistical software. Mathematical models included linear regression, logistic regression, state vector machine, confusion matrix, and Wilcoxon's sign rank test to predict the nature of pathology.

**Results:** A total of 41 patients were recruited with a mean age of 33 years. The 196 evoked fields were analyzed. Amplitude was reduced in the evoked field in affected hemisphere and latency was prolonged. Amplitude of distant evoked field was affected more than latency in the epilepsy group than tumor group. Displacement of evoked field found was 33% in AEF, 57% in MEF, 9% in VEF, and 16% in SSEF. More patients in the epilepsy group had abnormality in the distant evoked fields.

**Conclusion:** MEG helped in localizing the eloquent cortex and presurgical MEG mapping of eloquent cortex would help in computing the distance between the lesion and eloquent cortex. Being a functional imaging tool, it can help in understanding the pathophysiology of the lesions and its effect on the eloquent cortex.

#### **A0034: Clinicodemographic Determinants of Quality of Life of Patients with Juvenile Myoclonic Epilepsy**

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**Background:** Available literature on quality of life (QoL) and its clinicodemographic determinants in patients with epilepsy is on heterogeneous populations of patients. Patients with juvenile myoclonic epilepsy (JME) have a distinct clinicodemographic profile. We present our observations on clinicodemographic determinants of QoL in patients with JME.

**Objective:** To determine the quality of life and estimate the effect of clinicodemographic variables on quality of life of patient with JME.

**Methods:** Sixty patients with JME diagnosed as per standard clinicoelectroencephalographic criteria and aged  $\geq 18$  years were recruited by consecutive sampling method. Demographic details were recorded and QoL, quality of sleep, severity of depressive, and anxiety-related symptomatology were determined using quality of life in epilepsy-31 (QOLIE-31) questionnaire, Pittsburgh Sleep Quality Index (pSQI), Inventory of Depressive Symptomatology-Self Rated (IDS-SR), and Hamilton Rating Scale for Anxiety (HAM-A), respectively. Univariate and multivariate analyses of the demographic factors and clinical factors including epilepsy-related variables, sleep quality, depression, and anxiety was done.