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## Poster Presentation

### Intractable Post-Traumatic Epilepsy: Clinical Analysis of Patients with Blunt and Penetrating Head Injuries Sustained in War

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#### **Abstract**

Post-traumatic epileptic seizure is a common complication of brain trauma including military injuries. We present clinical characteristics and correlates of post-traumatic epilepsy in 163 head-injured veterans suffering from intractable epilepsy due to blunt or penetrating head injuries sustained during the Iraq-Iran war. The medical records of 163 war veterans who were admitted by the Epilepsy Department of the Shefa Neuroscience Center between 2005 and 2009 were retrospectively reviewed. The mean follow-up period after developing epilepsy was 17.2 years. The time interval between the trauma and the first seizure was shorter and the seizure frequency was higher in epileptic patients suffering from penetrating head trauma. There was no difference in seizure type between epileptic patients traumatised by blunt or penetrating injury. Patients with seizure frequency of more than 30 per month mostly had simple partial seizure. Frontal and parietal semiologies were observed more frequently in patients with penetrating trauma, whereas patients with blunt trauma showed a higher temporal semiology. The most common brain lesion observed by CT scan was encephalomalacia followed by porencephaly and focal atrophy. There was no association between intracerebral retained fragments and different characteristic features of epilepsy. Patients with military brain injury carry a high risk of intractable post-traumatic epilepsy decades after their injury, and thus require a long-term medical follow-up.

**Keywords:** Epilepsy, Seizure, Injury.

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