

ability to reach peak pleasure or orgasm (Bradford, 2006). However, further research is required in order to find other factors that can also affect female orgasm.

**Key words:** Female sexual dysfunction, anorgasmia, depression, anxiety

#### 144. FRONTAL LOBE ORIGIN IN MYOCLONIC SEIZURES: A HIGH-DENSITY EEG STUDY

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**Introduction.** Myoclonic seizures are classified as generalized seizures, engaging bilaterally distributed networks and displaying primary generalized discharges on conventional electroencephalography (EEG). However, emerging data point towards a presumed focal origin of these discharges.

**Aim of the study.** In the current study, we aimed to determine the cortical sources of the interictal generalized discharges in patients with myoclonic seizures by employing high-density EEG (HD-EEG).

**Materials and methods.** For this study, 40 patients (mean age  $\pm$  standard deviation:  $25 \pm 7$  years; 14 males) with myoclonic seizures were included. All participants were scanned with a 3T MRI machine and 256-channel EEG recording. The EEG electrodes were placed according to the international 10/5 system and included in a special net with a 20–25 mm interelectrode distance. For spatio-temporal source reconstruction, LORETA (low resolution brain electromagnetic tomography) solution was applied to first spikes of the interictal generalized discharges.

**Results.** In all cases the MRI and neurological exams were normal. Overall, 820 interictal generalized discharges were registered. In all 40 patients, the electric sources of interictal generalized discharges were detected in the frontal lobe. In 17 (42%) patients the origin of discharges was in the middle frontal gyrus (Brodmann Area (BA)-9 in 7 patients, BA-10 in 3 patients, BA-6 in 4 patients and BA-8 in 3 patients). In 13 (33%) patients the origin was identified in the superior frontal gyrus (BA-6 in 9 patients, BA-10 in 3 patients and BA-8 in 1 patient). In 10 (25%) patients the source was localized in the inferior frontal gyrus (BA-11 orbital part in 8 patients and BA-46 in 2 patients).

**Conclusions.** The results of HD-EEG suggest that myoclonic seizures are not truly generalized seizures in the sense of global activation of the cortex, but rather restricted networks of cortex are involved in the discharges and primarily recruit the frontal lobe networks. This data cannot be visualized with conventional EEG.

**Key words:** myoclonic seizures, high-density electroencephalography.