Relations Between Absence Seizures and the Thalamus

Absans Nöbetleri ve Talamus Arasındaki İlişkiler

Dear Editor,

We read with interest the article by Ozemir and her colleagues’ on volumetric analysis of the thalamus in idiopathic generalized epilepsy (IGE) (1). As they mentioned in this paper, different theories about etiopathogenesis of IGE have already been defined. But our current knowledge about that is limited to appearance of 3Hz spike and wave discharges of absence seizures rely on intact reciprocal cortico-thalamic connections. It has been experimentally shown that the synaptic organization of thalamus appears to be very similar between non-epileptic control group and genetic absence rats (2).

Although there are some articles related the size of the thalamus is similar or greater in the patients with absence epilepsy than controls, there is also a contrary finding which shows the thalamus size is smaller in childhood absence epilepsy (CAE) patients (3). These opposite results may be due to different modalities to calculate the size of the thalamus or inadequate patient size in each group. Pardoe and his colleagues have used voxel-based morphometry to show it’s feasibility in CAE and they found the results can be discrepant between unrelated centers even if they run the same technique (4).

References