lipidosis. Folia Neuropathologica 2012;50(4):330-45). (Response: Harvey Sarnat, MD, FRCP, Alberta Children’s Hospital, 2888 Shaganappi Trail, NW, Calgary, AB T3B 6A8, Canada. E-mail: Harvey.sarnat@albertahealthservices.ca).


MORPHOLOGICAL VARIATIONS OF HIPPOCAMPAL FORMATION IN EPILEPSY

Researchers at Hospital Sao Paulo and other centers in Brazil compared the hippocampal formation (HF) morphology of healthy asymptomatic individuals (n=30) with that of patients with mesial temporal lobe epilepsy and hippocampal sclerosis (MTLE-HS)(n=68), of patients with malformations of cortical development (MCD)(n=34), and of patients with morphological HF variations without other structural signs (pure MVHF)(n=12). Morphological variations of HF were significantly more frequent in patients with MCD than in patients with MTLE-HS or in normal individuals. Febrile seizures occurred only in patients with MTLE-HS, supporting the hypothesis that febrile seizures cause the MTLE-HS. Refractory epilepsy is more associated with abnormalities like hippocampal sclerosis or malformations of cortical development than with variations of the hippocampal formation itself. Patients with pure morphological variations of the hippocampal formation showed higher incidence of extratemporal seizure onset. (Hamad APA, Carrete H Jr, Bianchin MM, et al. Morphological variations of hippocampal formation in epilepsy: Image, clinical and electrophysiological data. Epilepsy & Behavior 2013 Jan;26(1):67-70). (Response: Dr Hamad. E-mail: anahamad@gmail.com).

COMMENT. The authors conclude that morphological variations of hippocampal formation (HF) are rare in patients without seizures and that hippocampal formation malrotation is probably pathological. The development of HF is complete after 18 weeks gestation and is similar to the adult HF after 30 weeks gestation. Some authors suggest that febrile seizures might lead to hippocampal sclerosis or to hippocampal formation abnormalities but not to epilepsy. (Auer T, Barsi P, Bone B, et al. History of simple febrile seizures is associated with hippocampal abnormalities in adults. Epilepsia 2008 Sep;49(9):1562-9). The relationship between HF dysmorphism, febrile seizures and hippocampal sclerosis is still unclear.