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Oral presentation

## A case of porencephaly and magnetic resonance imaging findings in two domestic short-haired cat

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## Abstract

Porencephaly; It is a cyst or cavity in the brain parenchyma, filled with cerebrospinal fluid (CSF), usually associated with the ventricles or subarachnoid space. It is a rare condition in cats and dogs. It occurs as encephaloclastic porencephaly resulting from degeneration of brain tissue due to ischemia, bleeding, infection and trauma in the fetal period or as developmental porencephaly due to neuronal migration disease during the development of cerebral hemispheres. Generalized and focal seizures and loss of vision are the most prominent clinical findings. The most sensitive test for the diagnosis is Magnetic Resonance Imaging (MRI). The cases consisted of 2 cats brought to Istanbul University-Cerrahpasa Veterinary Faculty, Surgery Department Polyclinic with seizure complaints. The first case was a domestic short-haired, female, 1 old cat and the second case was a non-neutered, a domestic shorthaired, male, 1 old cat. It was determined that the first case had frequent tonic-clonic seizures and the second case had complex partial seizures. In the neurological examination, loss of vision was detected in the first case. In cranial MRI examinations of cats, in the first case left cerebral hemisphere, associated with the left lateral ventricle, in the second case, the right cerebral hemisphere, associated with the lateral ventricle, hypointense, consistent with CSF in T1-weighted and FLAIR sequences, hyperintense, wide porencephaly consistent with CSF in T2-weighted sequences area detected. Seizures were controlled with orally administered levetiracetam (20 mg/kg at 8 hour intervals). In the following process, it was learned that the cats were sometimes stagnant at home, did not play, did not show interest in their owners, and sometimes did not notice distant objects. In this study, it is aimed to emphasize that partial or generalized seizures in cats may be associated with porencephaly and the essentially to evaluate the hippocampal volume and symmetry, which is reported as the source of seizures, when evaluating typical MRI findings of porencephaly.

**Keywords:** cat, porencephaly, seizure, mri

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