

Regional cerebral blood flow abnormalities in an epileptic boxer dog

Piotr Lass¹, Jacek Teodorczyk¹, Marcin Krzemiński²

¹Department of Nuclear Medicine, Medical University, Gdańsk, Poland
²Veterinary Hospital Łąkowa, Gdańsk, Poland

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A 6-year-old boxer dog was presented for rCBF SPECT scanning due to epileptic seizures. The epilepsy was presented as frequent convulsions with a total loss of consciousness. Also, episodes of epileptic state refractory to phenobarbital treatment were found.

rCBF SPECT scanning was performed using a triple-head gamma-camera Multiispect-3 (Siemens, Erlangen, Germany) 60 min. after i.v. application of ^{99m}Tc-ECD (FAM, Łódź, Poland) of activity 370 MBq shortly after an epileptic seizure. rCBF scanning showed a sharply delineated area of hypoperfusion in the left temporal and frontal area, asymmetry index 58% (arrow), and a second smaller hypoperfused area in the right temporoparietal areas (Figures 1 and 2). Anamnesis data could not exclude a head trauma in the left temporal area.

Veterinary nuclear medicine is growing in its role [1], but neurological applications are rare [2]. We previously reported a case of CNS ischaemia in a demented dachshund dog [3]. One may expect that in the future rCBF scanning may have a growing role in epileptic or demented small animals.

References

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Correspondence to: Piotr Lass
Department of Nuclear Medicine, Medical University of Gdańsk
ul. Dębinki 7, 80-211 Gdańsk, Poland
Tel: (+48) 58 349 22 04, fax: (+48) 58 349 22 00
e-mail: plass@amg.gda.pl

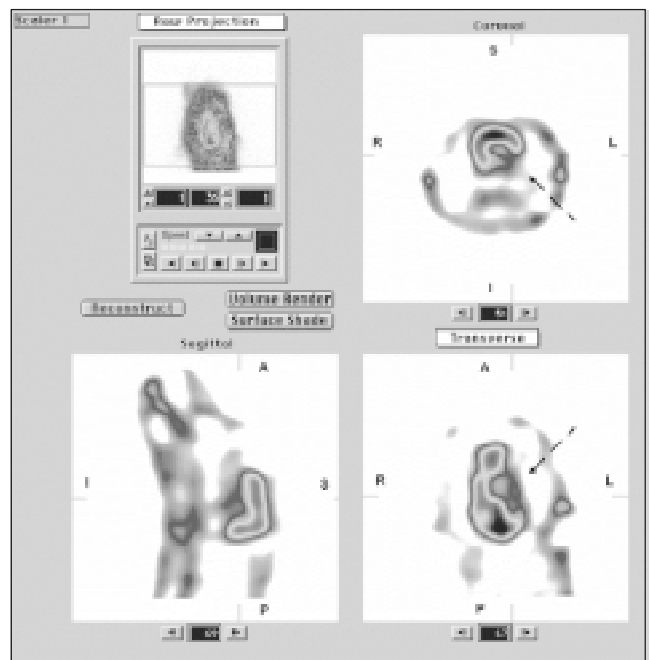


Figure 1. Three-projections view of dog's head. Hypoperfused area indicated with an arrow.

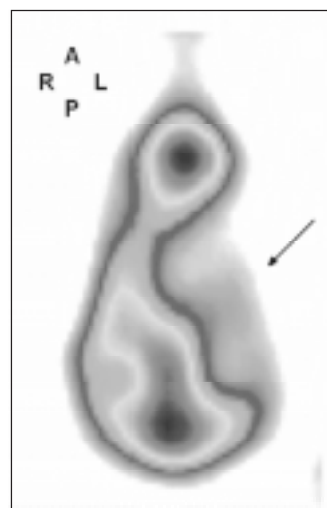


Figure 2. Enlargement of a transverse slice — fronto-temporal perfusion indicated with an arrow.