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DOUBLE THALAMIC INFARCTS IN A GERIATRIC DOG – CLINICAL PRESENTATION, DIAGNOSTIC IMAGING AND OUTCOME

Introduction

A CVA or 'stroke' is defined as a sudden onset of non-progressive, focal brain signs that occur secondarily to cerebrovascular disease^(1,2). CVAs may also go undetected in veterinary patients⁽³⁾.

Case

A fourteen-year-old male castrated large canine crossbreed was presented with a peracute onset of confusion, circling to the left, a left head turn, right-sided proprioceptive deficits and ataxia with no obvious paresis (video). A left forebrain lesion was suspected. Differentials considered to be most likely were of vascular and neoplastic origin – a cerebrovascular accident (CVA) was suspected.

Results and follow-up

Magnetic resonance imaging studies were performed 72 hours after onset of the signs (see figure 1). Board-certified diagnostic imaging specialists concluded that the lesion was most likely compatible with malignancy such as a glioma. Despite this, the most likely clinical diagnosis was a double thalamic infarct. No treatment was initiated except from prednisone in anti-inflammatory doses for a short period to counter vasogenic edema and resultant mass effect as noticed on MR images. The dog made a full recovery within two weeks. Follow-up nine months later revealed that the dog was still doing fine.

Conclusions

Although intracranial infarcts or hemorrhages can only be definitively diagnosed by histopathology, clinical presentation and imaging findings are often valuable in the differentiation of neoplasia or inflammatory pathology versus CVAs. In one study, 10-47% of CVAs were misdiagnosed as gliomas⁽⁴⁾. The peracute onset of markedly lateralized signs followed by swift recovery and return to normal with minimal therapeutic intervention fits the suspicion of a CVA in this dog⁽¹⁻³⁾. The revelation of a

(suspected) previous thalamic infarct on the right side was a coincidence, but shows that thalamic infarcts can go undetected in veterinary patients, as the owners had no recollection of any previous neurologic signs whatsoever⁽³⁾.

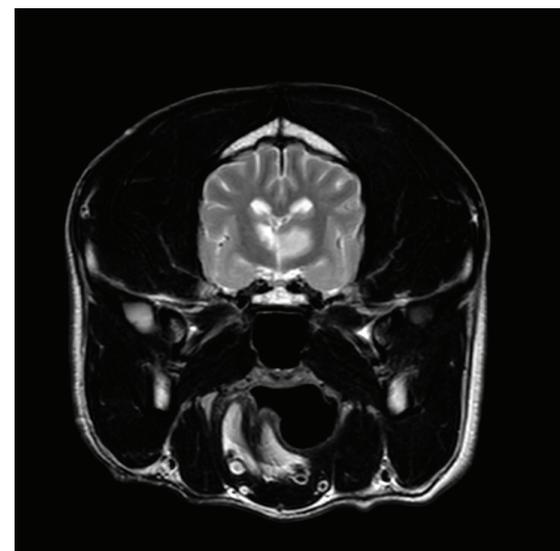


Figure 1: T2-weighted (3.0 T) transverse image at the level of the thalamus of a fourteen-year-old male castrated large canine crossbreed with a peracute onset of signs suggestive of a left-sided forebrain lesion.

References

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