

عنوان مقاله:

Volumetric evaluation of pituitary gland in dog and cat using computed tomography

محل انتشار:

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خلاصه مقاله:

The objective of this study was to evaluate the pituitary gland dimensions due to age and weight using computed tomography (CT) in dogs and cats. The CT images of pituitary gland were assessed in 11 client-owned dogs (six males and five females; age range, 1 to 9 years) and 15 client-owned cats (eight males and seven females; age range, 1 to 14 years) with no evidence of pituitary diseases. The length, height, width and volume of the pituitary gland were measured in sagittal and transverse planes. Mean pituitary length, width, height and volume (\pm standard deviation: SD) were respectively 4.96 (\pm 0.69 mm), 3.62 (\pm 0.64 mm), 2.62 (\pm 0.05 mm) and 26.19 (\pm 7.99 mm³) in cats and were 7.00 (\pm 2.14 mm), 4.80 (\pm 1.20 mm), 3.80 (\pm 0.70 mm) and 77.53 (\pm 51.64 mm³) in dogs, respectively. Mean pituitary height-to-brain ratio (P:B ratio), (\pm SD) in cats and dogs was 0.28 (\pm 0.05) and 0.21 (\pm 0.03), respectively and mean percent of pituitary volume to brain volume (\pm SD) in cats and dogs was 0.10 (\pm 0.05) and 0.10 (\pm 0.07), respectively. There was no significant correlation between the size of pituitary gland and age, weight and body condition score (BCS) in dogs, however in cats, significant difference was found between height of pituitary gland and weight and BCS, pituitary width and weight and P:B ratio and BCS. These findings could be useful to identify abnormal pituitary gland enlargement in CT images. To be more accurate in the assessments, further studies are required.

کلمات کلیدی:

Cat, Computed tomography, Dog, Pituitary gland

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