

86P- CERVICAL CYSTIC LYMPHANGIOMA IN A YOUNG DOG: CT FINDINGS

Jessica Bassi (1), Maria Elena Andreis (2), Martina Manfredi (3), Vanessa Rabbogliatti (3), Davide Danilo Zani (3), Mauro Di Giancamillo (3)

(1) Università degli Studi di Milano, Centro Clinico Veterinario e Zootecnico Sperimentale. (2) Istituto Veterinario di Novara. (3) Università degli studi di Milano, Dipartimento di Medicina Veterinaria.

Lymphangioma is a rare lymphatic disorder; in veterinary medicine it is still considered a benign tumour, while in human medicine has been recently classified as a Lymphatic Malformation (LM), in fact it probably originates from a failure in development of connections between lymphatic and venous system. Reported localizations of canine lymphangioma include skin, subcutaneous and fascial tissue of axilla, limbs, inguinal and mammary regions; lymph nodes; retroperitoneal space; nasopharynx. In the present report we describe the computed tomographic (CT) features of a cervical cystic lymphangioma in a young dog. A 1-year-old intact male Italian Shepherd dog was referred to the primary care veterinarian with a 1-month history of left ventrolateral neck swelling. No other clinical signs were present. Ultrasonographic (US) examination revealed a mass with hyperechoic thick wall, hypoechoic content with hyperechoic fluctuating areas. Fine needle aspiration biopsy (FNAB) revealed a cloudy pinkish fluid, cytologically referable to serous-hematic fluid with chronic inflammation. For better assessment of the morphology and of the margins of the lesion, the dog was referred for CT examination. Pre- and post-contrast CT scan of head, neck and thorax were made. A mass located between the muscles of the caudal neck and thoracic/axillary regions (from the level of C4 to the level of T2) was found, which partially occupied the left visceral space of the neck and bulged into the thoracic inlet. The mass was ellipsoid-shaped (40x45x140 mm), with well-defined margins and heterogeneous soft tissue attenuation. It was apparently capsulated, with fluid-like content and soft tissue attenuating septa and small areas within the fluid. Adjacent to the mass three areas of soft tissue mineralization, smoothly marginated, were found. It was responsible for mild mass effect, without significant compression on the surrounding structures. Mild left axillary and left medial retropharyngeal lymphadenomegaly was noted, with normal shape and attenuation of the lymph nodes. Post-contrast images showed moderate enhancement of the mass wall and the soft-tissue-attenuating areas/septa within it; no enhancement of the fluid was noted. No other abnormalities were found. The mass was completely surgically excised and submitted for histopathologic analysis, with a definitive diagnosis of cystic lymphangioma. In human literature CT features of lymphangioma are widely described, while in veterinary literature there are no reports about its CT appearance; moreover, human lymphangioma is described as preferentially located in the neck and axillary regions, while, to our knowledge, cervical localization has never been reported before for canine lymphangioma.

- (1) Gamlem H. et al. Canine vascular neoplasia - a population-based clinicopathologic study of 439 tumours and tumour-like lesions in 420 dogs, *APMIS Suppl*, 125:41, 2008.
- (2) Belanger MC. et al. Invasive multiple lymphangiomas in a young dog. *J Am Anim Hosp Assoc*, 35:507-509, 1999.
- (3) Romeo V. et al. Correlative imaging of cystic lymphangiomas: ultrasound, CT and MRI comparison, *Acta Radiologica Open*, 4(5): 1-4, 2015.