



### CAUDAL LUMBAR SPINAL CYSTS IN TWO FRENCH BULLDOGS

**Introduction** – Spinal cysts associated with spinal cord dysfunction are rare conditions in veterinary medicine, but are increasingly recognized due to the availability of advanced imaging techniques <sup>(1,2)</sup>. Recently, Da Costa et al. (2016) published an overview on spinal cysts and Lowrie et al. (2016) introduced a human classification scheme in the veterinary literature <sup>(2,3)</sup>. In this case report we present spinal cysts in the caudal lumbar area of two French Bulldogs. To our knowledge, extradural meningeal cysts in French Bulldogs have not been described previously <sup>(3)</sup> and arachnoid cysts

(diverticula) have not been reported in the caudal lumbar (L6-L7) region in dogs <sup>(4,5)</sup>. We report magnetic resonance imaging (MRI) findings, surgical treatment, histopathology and clinical and radiologic follow up.

**Material and methods** – Two male French Bulldogs (5 and 8-year-old) with low back pain and neurological deficits underwent MRI and cauda equina compression due to a spinal cyst was found in the caudal lumbar region. The dogs underwent dorsal laminectomy and the cyst was completely removed (Figure 1.) in one dog and in the other dog the cyst was marsupialized. MRI was repeated in one dog and both dogs were pain free during follow-up evaluations.

**Results and conclusions** – Based on radiological, intra-operative and histopathological findings the first case was categorized as an extradural Type Ib spinal cyst according to Lowrie et al. (2014) and case 2 as a Type III intradural arachnoid diverticula. This is the first report of caudal lumbar spinal cysts in French Bulldogs and it is concluded that spinal cysts should be included in the differential diagnosis of cauda equina syndrome and low back pain in French Bulldogs.

#### References

- 1 Bismuth C, Ferrand FX, Millet M, Buttin P, Fau D, Cachon T, et al. Original surgical treatment of thoracolumbar subarachnoid cysts in six chondrodystrophic dogs. *Acta Vet Scand* 2014 May 16;56:32-0147-56-32.
- 2 da Costa RC, Cook LB. Cystic Abnormalities of the Spinal Cord and Vertebral Column. *Vet Clin North Am Small Anim Pract* 2016 Mar;46(2):277-293.
- 3 Lowrie ML, Platt SR, Garosi LS. Extramedullary spinal cysts in dogs. *Vet Surg* 2014 Aug;43(6):650-662.
- 4 Mauler DA, De Decker S, De Riso L, Volk HA, Dennis R, Gielen I, et al. Signalment, clinical presentation, and diagnostic findings in 122 dogs with spinal arachnoid diverticula. *J Vet Intern Med* 2014 Jan-Feb;28(1):175-181.
- 5 Moissonnier P, editor. Facet joints and cysts. *Proceedings of the 24th ECVS Annual Scientific Meeting of the cervical spinal disease forum*; 2015; .

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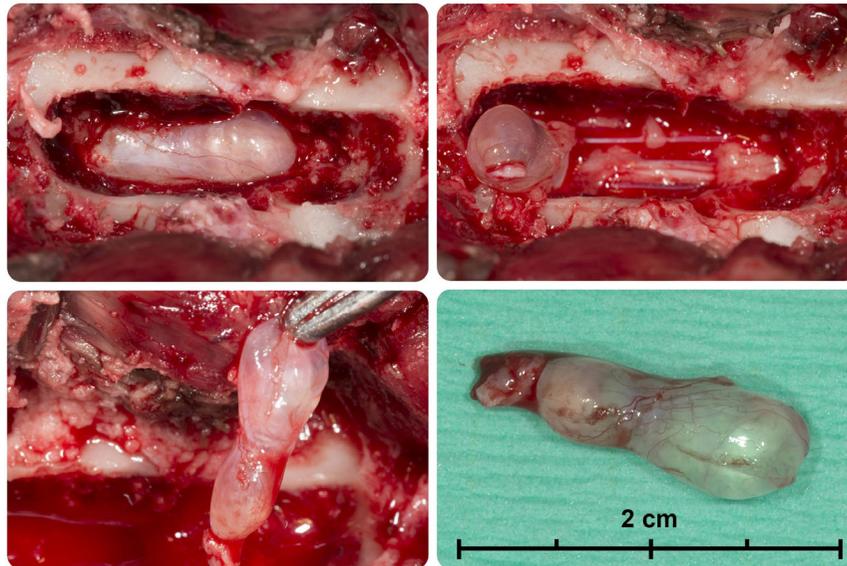


Figure 1. Case 1. A) Dorsal laminectomy at L6-L7 revealed the cyst in situ. The cyst was released from the cauda equina caudally (B) and retracted cranially (C) before being removed completely without collapse (D).