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Incidental finding case of canine urinary capillariasis in the city of Tandil, province of Buenos Aires, Argentina

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Pearsonema plica (syn. *Capillaria plica*) is a nematode that belongs to Capillariidae family and parasites the urinary tract of wild animals, mainly wolves and foxes. Isolated reports exist in domestic carnivores. The life cycle of this parasite is indirect and involves an earthworm as intermediate host, carnivores act as definitive host releasing eggs through urine. Infection with *Pearsonema plica* is generally asymptomatic, but symptomatic cases described in dogs and cats have shown polaquiuria, dysuria, hematuria, polydipsia, urinary incontinence and fever. Diagnosis implies urinalysis to search mainly eggs, larvae and mature parasites in the sediment. Abdominal ultrasound highlights thickening of the bladder wall and hyperechogenic foci in the light due to the presence of cell debris, eggs, larvae or adult worms. Effective treatment against capillariasis involves benzimidazole, levamisole or ivermectin. The aim of this work is to report an incidental finding case of urinary capillariasis in a canine attended the School Hospital of Small Animal (HEPA), FCV, UNCPBA, Tandil. A 10 year old male greyhound dog was admitted to HEPA in poor condition with paraphimosis, scabs in penis and a mass in the left tarsus, cytologically and radiologically compatible with sarcoma-osteosarcoma. Due to this last, pre surgical exams and amputation of the left posterior limb were indicated. During pre surgical exams (that involves serum chemical profile, blood count, urinalysis and cardiological evaluation), urinalysis alterations were found. Urinary density, measured by refractometer, was 1012 and by test stripes pH of 7.5, proteinuria and hematuria were observed. Eggs of *Capillaria spp.* were seen in urinary sediment obtained by centrifugation of a sample obtained by probing. In urinary sediment obtained by cystocentesis, eggs and larvae also were visualized. By ultrasonography, echogenic laced structures without acoustic shadow (AS) compatible with adult parasites were found in left renal pelvis. In urinary bladder, lineal structures of 16 x 0.4 mm without AS corresponding with larvae structures were also seen. Finally, left pelvic limb amputation was prioritized due to increasingly pain in the affected tarsus. Unfortunately, during surgery recovery, the patient developed anorexia, decay, anemia, general deterioration and pain refractory to analgesic treatment. As a consequence, euthanasia was decided and capillariasis treatment could not be performed. In conclusion, urinary capillariasis could be an underdiagnosed infection probably because of the lack of clinical signs in infested animals. Local epidemiologic studies of the disease are necessary to know its real prevalence so as to be considered among differential diagnoses in canines with similar signs and even in asymptomatic patients.