

OCULAR PROTOTHECOSIS IN RHODESIAN RIDGEBACK DOG

Authors: M.P. Cassarani^{1,2}, A. Marchegiani¹, F. Beribè¹, D. Spaziante¹, F. Dini¹, V. Cuteri¹, A.R. Attili¹, A. Spaterna¹, C. Giudice³, M. Cerquetella¹

¹School of Veterinary Medical Science, University of Camerino, Italy

²REOVVA Membre, Réseau Européen d'Ophtalmologie Vétérinaire et de Vision Animale

³DIVET, Faculty of Veterinary Medicine, University of Milan, Italy

Purpose: To describe ocular protothecosis in dog associated to soft stool and haematochezia.

Methods: A 6-year-old, spayed female, Rhodesian ridgeback dog was referred to the University of Camerino, Veterinary Teaching Hospital, because of haematochezia associated to soft stool and disorientation. Physical examination shown diffuse lymphadenopathy and the lack of the menace response in the right eye. Ophthalmological examination in the anterior segment revealed lack of menace response in the right eye and lack of direct PLR in the same eye. Fundic examination showed bullous retina detachment in the right eye, confirmed by ocular ultrasonography; the left eye was normal. Lymphoma was excluded by cytofluorimetry. Symptomatic therapy for a couple of week, plus Itraconazole for 30 days for algal infection were performed. Amphotericin B was not used because the drug in Italy is only for hospital use. Being both unresponsive to the therapy and clinically worsening, euthanasia was performed at the owner's request..

Results: In smears of lymph -node, rectal mucosa and vitreous fluid from the right eye *Prototheca spp.* organisms were detected. Necropsy revealed the presence of *Prototheca* organisms in liver, spleen and kidneys. *Prototheca* was also histologically detectable in the right eye along with severe granulomatous infiltration of subretinal space.

Conclusion: Protothecosis is an uncommon intestinal disease in dogs in Italy. To the authors knowledge this is the first report of ocular Protothecosis in Rhodesian ridgeback dog with monolateral eye vision loss and haematochezia associated to soft stool.

Support: None