Current status of feline lungworm in the UK

We write to provide additional information to the excellent recent review "Canine and feline lungworm infections in the UK" by Jenny Helm and Eric Morgan.¹ A recent survey, using the Baermann technique to identify lungworm infection, found that 2.2% of cats in the UK had *Aelurostrongylus abstrusus* larvae in faeces.² All infected cats had outdoor access and had not been recently wormed. This demonstrates that this parasite is present in a significant number of UK cats.

Diagnosis has become much easier following the introduction of the Extended Respiratory Pathogens PCR panel (Code mt62), by CTDS, which can identify: Feline Calicivirus, Feline Herpes Virus-1, *Chlamydia felis, Bordetella bronchiseptica, Mycoplasma felis, Mycoplasma gateae* and, importantly, *A. abstrusus*. This test can be performed using bronchoalveolar fluid (BALF) or deep throat swabs: to date, one of 79 BALFs has been positive for *A. abstrusus*.

Treatment options have also greatly improved, with two spot-on medications are now licensed, including; Broadline[®] (eprinomectin; Merial) for the treatment of L3, L4 and adults *A. abstrusus*, and L4 and adults *Troglostrongylus brevior*; and Profender[®] (emodepside; Bayer) for the treatment of adult *A. abstrusus* worms. Other products have been reported in literature, but are not currently licensed for the treatment of lungworms in cats in the UK.³

We note a recent increase in reports of feline lungworm infections (*A. abstrusus, T. brevior and Eucoleus aerophilus* [*aka Capillaria aerophila*]) world-wide, particularly across mainland Europe. Italian studies revealed that cats with lungworm infection - somewhat counterintuitively - do not always cough, they may just be dyspnoeic and/or have nasal discharge. The lung pattern is more usually interstitial than bronchial; and the BALF does not always contain eosinophils.⁴

One of us (DGM), has recently seen three cases of feline lungworm infection; they were four to 18 months old, two were pedigree, one with little outdoor access (but had been see eating a slug); all had severe pneumonia (Figure 1), one also had pyothorax, while another had significant submandibular lymphadenopathy. Treatment, with sometimes repeated courses of fenbendazole and/or Advocate[™] (moxidectin; as yet unlicensed for the treatment of feline lungworm), plus anti-inflammatory courses of prednisolone, was needed to resolve disease.

Since lungworm infections are now being identified more frequently (including by mt62), even in young and pedigree cats with limited outdoor access, it is important that cats exhibiting coughing and/or dyspnoea receive appropriate treatment with Broadline[®], Profender[®] or fenbendazole before undertaking more invasive or expensive clinical investigations e.g. bronchoscopy and/or BAL. Prophylactic worming might be advisable, especially in outdoor cats that cough.

Yours sincerely,

Professor Danièlle Gunn-Moore: danielle.gunn-moore@ed.ac.uk The Royal (Dick) School of Veterinary Studies and The Roslin Institute, University of Edinburgh, Easter Bush Campus, Midlothian, EH25 9RG

Dr. Hany M. Elsheikha

School of Veterinary Medicine and Science, University of Nottingham, Sutton Bonington Campus, Leicestershire, LE12 5RD

References

- HELM J & MORGAN E. Canine and feline lungworm infections in the UK. *In Practice* 2017:39, 298–315.
- **2.** ELSHEIKHA HM, SCHUNACK B & ROLAND SCHAPER R. Prevalence of feline lungworm *Aelurostrongylus abstrusus* in England. WAAVP 2017, Kuala Lumpur, Malaysia.
- CRISI PE, ASTE G, TRAVERSA D *et al*. Single and mixed feline lungworm infections: clinical, radiographic and therapeutic features of 26 cases (2013-2015). *J Feline Med Surg* 2017:19, 1017–29.
- **4.** ELSHEIKHA HM. Lungworms: a growing threat to companion animal health. Companion Animal 2016:21, 556–65.



Fig 1: CT section through the caudal thorax of an 11-month-old male neutered domestic shorthaired cat, showing dense patchy pneumonia due to *Aelurostrongylus abstrusus*