Is feline lungworm infection underestimated in the UK?

Know how to spot lungworm infections, which may become more clinically relevant with climate change and increasing pet travel

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The spread of *Angiostrongylus vasorum* across the UK over the past two decades alongside media campaigns and research into its epidemiology, diagnosis and prevention has led to raised awareness of this parasite. In comparison, the impact of feline lungworms on the health of UK cats has been relatively overlooked with knowledge gaps persisting in their UK distribution and pathogenicity. While cats are not infected with *A. vasorum*, they can be affected by two lungworms of veterinary significance that have been demonstrated to be endemic in the British Isles. These are *Aelurostrongylus abstrusus* and *Eucoleus aerophilus*.

*Aelurostrongylus abstrusus* is a worldwide distribution and is thought to be endemic in most European countries including the UK and Ireland. It has an indirect life cycle with first-stage larvae (L1) passing out in the faeces of cats and molluscs acting as intermediate hosts. A number of reptiles, amphibians and birds can act as paratenic hosts, making hunting cats at greater risk of infection (Traversa and Di Cesare, 2013). Adult worms live in the lung parenchyma and small bronchioles with small foci in the lung tissue, although larger foci of up to 1cm with wider areas of consolidation can occur. Muscular hypertrophy and hyperplasia of the bronchioles, alveolar ducts and pulmonary arteries are typical pathological changes.

Although *A. abstrusus* infections are commonly of low pathogenicity and reports of fatal cases are rare, infected cats commonly present with respiratory signs. The most common clinical presentation is a mild to moderate chronic cough, but many other signs may be present including sneezing, wheezing, mucopurulent nasal discharge and dyspnoea, with or without tachypnoea. These in turn may lead to lethargy, anorexia and weight loss. Fatal cases are rare but can occur, especially in kittens and the immune suppressed. A fatal case of aelurostrongylosis was recently reported in a UK kitten with an exceptionally high worm burden (Dobromylskyj et al., 2019), demonstrating the need for *A. abstrusus* to be considered as a differential for severe as well as mild respiratory signs in both adult cats and kittens.

Diagnosis relies upon Baermann faecal analysis (Figure 1) for the detection of L1 larvae. In experienced hands this can be highly specific but is relatively insensitive as larvae are...