

POSTER PRESENTATION

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Metastrongylus spp. infection in a farmed wild boar (*Sus scrofa*) in Finland

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Summary

Metastrongylus spp. (Nematoda, Metastrongylidae) are lung worms of swine and occur worldwide. Species in the family include *M. apri*, *M. pudendotectus*, *M. asymmetricus*, and *M. salmi*. Earth worms are intermediate hosts and pigs get infected when eating earth worms.

In Finland wild boar farming began in the 1980s and now there are over hundred farms and over 2000 wild boars in different parts of the country. This case report is part of a study aiming to get more information about the diseases that occur in the farmed wild boar population in Finland.

Lungworms were detected in an eight month old farmed wild boar sent for necropsy from a farm situated in eastern Finland. In the group of 25 animals of about the same age, the farmer had noticed poor growth and gait abnormalities. He submitted two euthanized boars (A and B) for necropsy. A routine necropsy was performed and tissue samples were collected for histopathology, bacteriology and parasitology.

The boar A was in a poor nutritional condition. The lungs were slightly mottled, but otherwise normally inflated. Large numbers of white thread like nematodes were detected in the bronchi (Fig. 1.). Bones were soft. In the faecal sample, 7500 EPG *Metastrongylus* spp. eggs were detected with flotation (Fig. 2.). The boar B was in a moderate nutritional condition. No lung worms were detected. The main pathological diagnosis of both was osteomalacia due to deficiency of mineral feeding. However, the the poor nutritional condition of the boar A infected with lung worms was possibly partly due to the lung worm infection. Four additional faecal samples were sent from remaining boars from the farm and two

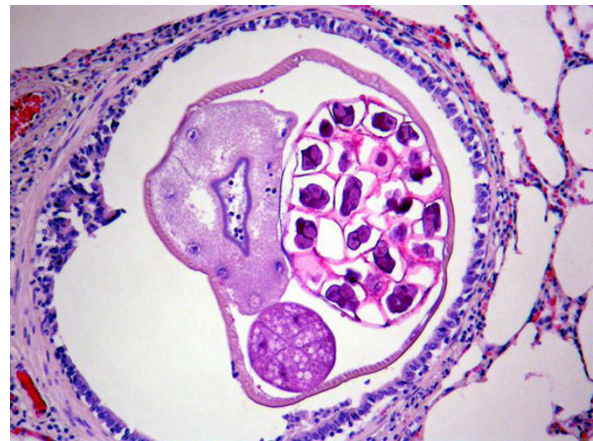


Figure 1 Cross section of *Metastrongylus* spp. in the lung.



Figure 2 *Metastrongylus* spp. egg with a larva inside.

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of them were also positive for *Metastrongylus* spp. eggs (100 and 200 EGP).

In Finland *Metastrongylus* spp. has occurred sporadically in pigs decades ago in southeastern parts of the country [unpublished, Nikander, [1]. It was not detected in domestic pigs in a large study done in all Nordic countries in 1980's [1]. It was also not found in a study of Danish organic swine herds [2]. In natural wild boar in many countries this parasite is common [3-6]. In the modern pig industry this infection seems to have been disappeared, because there is no contact with the intermediate host, the earth worms. However, in the farmed wild boar, and in situations where pigs are kept outdoors, *Metastrongylus* spp. should be considered as a possible cause of poor growth and respiratory signs.

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