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Publication date: 2018

Document Version
Publisher's PDF, also known as Version of record

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Citation (APA):
A new report of the carnivore-transmitted Taenia ovis cysts infesting the heart muscles of sheep in Denmark

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To our knowledge, this is the first report of Taenia ovis infections in Danish sheep. The cysts infested the hearts, diaphragm and skeletal muscles of at least 130 lambs from one specific farm localized in South Jutland in spring 2016. Morphological diagnosis is impossible due to high resemblance to other Taeniid infections, hence molecular typing of the mitochondrial cytochrome c oxidase I (cox1) gene was implemented. We could not identify the definitive hosts, but we suspect that infection might either be due to the importing of infected dogs to the farm or due to the recent localization of wild carnivores in the area; namely wolves, raccoon dogs and jackals. The widespread infection of T. ovis in this farm is of concern to veterinary authority and to meat producers; the meat is condemned due to aesthetic reasons which causing economic losses to the farmers and to stop the possible spread of the infection to susceptible wildlife definitive hosts in the area.