

Pathological changes in dictyocaulosis of reindeer

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Abstract: The lungworms produce pathological alterations in the lungs and may cause severe illness in many wild and domesticated animals. The infection was documented more than half a century ago in reindeer by Hellesnes (1935). The lungworm of reindeer was originally described as *Dictyocaulus viviparus* (Bloch 1782) but was identified as *D. eckerti* by Boev in 1934 after morphological studies. The pathological changes in the lungs are illustrated on the basis of present studies.

The material consists of 15 lungworm-positive lungs of slaughtered reindeer from Eastern Lapland. The parasitological and tissue samples were studied by routine methods.

The following histopathological lesions are considered typical for *Dictyocaulus*-infected lungs in reindeer:

The acute changes consisted of presence of vascular fluids rich in inflammatory cells and mucus in bronchial lumina which also were regionally narrowed. Respiratory tissues were locally condensed by the inflammatory reaction. In chronically inflamed areas the indurations also contained giant cells and calcified debris. Lymphatic reactions were prominent. In future studies the morphology of the developmental stages of *D. eckerti* and the pathology in the different phases of dictyocaulosis will be investigated.

References:

Hellesnes, P. 1935: Rensnyltere. (Parasites in reindeer). - *Norsk Veterinærtidsskrift* 47,(3):117-137.