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Artikel: Atypical basal bodies in the oviductal mucosa (ampulla) of gilts with primary ciliary dyskinesia (PCD)

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retroviruses (4), as these would induce primary tumour transformation.

Microscopically, the tumour mass is covered by a hyperplastic respiratory epithelium, while on the inside of the lamina propria there is loose connective tissue rich in oedematous liquid which is P.S.A. positive. In the central part of this connective stroma, marked neoplastic glandular development is evident in the form of numerous acinotubular glandular structures of various sizes, with an irregular lumen occupied by cellular debris and an acidophilic, P.A.S. positive substance. There were neoplastic structures surrounded by intense lymphocyte and plasma cell infiltration. Other glandular structures were clearly cyst-like, with a planocuboidal ephitelium, but in no case did tey exhibit any cellular reaction.

Ultrastructurally, it could be seen that the tumour mass was covered by a hyperplastic respiratory epithelium, in which ciliated mucous cells with microvilli could be distinguished. Numerous plasma cells were found within the mass. These had a highly-developed granular endoplasmic reticulum, and the cisternae, whose core was fairly electron dense, were considerably dilated. This could suggest the development of an important immune response from the neoplastic tissue. Equally evident was the presence of numerous multinucleated cells with irregular nuclei and a dilated granular endoplasmic reticulum.

Many viral particles were present, both in the intracellular and extracellular spaces. They were coated with a capsid and the core was moderately electron dense. These particles were always found in dense aggregates.

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ATYPICAL BASAL BODIES IN THE OVIDUCTAL MUCOSA (AMPULLA) OF GILTS WITH PRIMARY CILIARY DYSKINESIA (PCD)

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The basal bodies/centrioles have a remarkable degree of constancy in size, shape, location and ultrastructure, so that atypical ones are very rarely seen in normal and pathological tissues.

Abnormalities of the basal bodies are more frequently observed in the «immotile cilia syndrome» in human and canine cases.

We describe atypical basal bodies in the oviductal mucosa of gilts affected by the primary ciliary dyskinesia (PCD).

In fact, we examined 500 cross-sectioned basal bodies and found roughly 3% of atypical basal bodies.

Defective basal bodies of so-called «half-centrioles» type were present in a fairly high percentage (1.8%).

Other abnormalities were represented by the distortion of geometrical configuration, the presence inside the lumen of electron-dense granular material. Only one basal body was characterized by 8 triplets and one singlet.

We discuss this report on the basis of the most recent genetic studies about the molecular composition of basal bodies/centrioles.

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EXPERIMENTALLY INDUCED LIVER GRANULOMAS AFTER LONG-TERM INHALATION OF QUARTZ IN NON-HUMAN PRIMATES

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Extrapulmonary lesions of silicosis are well known in human pathology. They mainly occur in the liver, spleen and bone marrow (2, 6). In experimental medicine, hepatic granulomas could be induced by intravenous injection of silica in rats and mice (3, 4). The experiments reported here were carried out to study the effect of simultaneous exposure to quartz and excess pressure on the development of interstitial lung fibrosis. Additionally to alterations of lungs and lung associated lymph nodes, quartz induced liver lesions were detectable (5).

Material and methods

Cynomolgus monkeys were exposed for 26 months, 5 days per week and 8 hours per day to conditions listed below:

group	n	quartz (mg/m^3)	pressure (bar)
I	5	–	1.0
II	7	5.0	1.0
III	4	5.0	2.5
IV	5	–	2.5

At the end of the study, computed tomography as well as X-ray examination were undertaken. The respiratory tract was fixed by instillation. Additionally, a retrograde perfusion via the abdominal aorta was carried out. The morphologic and morphometric evaluation was done on paraffin embedded histological sections stained with haematoxylin-eosin (H&E) and after silver impregnation according to Gomori. Morphometric evaluation was carried out with the