

MICROMORPHOLOGICAL CHANGES OF *Toxocara canis* NEMATODE UNDER THE ACTION OF PYRANTEL PAMOATE

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Summary. The micromorphological changes in the structures of *Toxocara canis* under the action of 14,4 mg/kg of pyrantel pamoate *in vivo* were studied on the 8th, 12th, 24th and 36th hours post treatment. Eight naturally infected puppies were treated with pyrantel pamoate and the eliminated parasitic nematodes were collected for histological studies.

The results show that the anthelmintics applied cause serious changes in the structure of intestinal cell, hypodermics and muscle cell *T. canis*. The changes may be described as destructive, degenerative and necrotic processes. The intestines are predominantly affected by the drug. The micromorphological changes in intestinal cells were found on the 8th hour of the action of pyrantel pamoate, and by the 36th hour the intestinal cells had been completely destroyed. The muscle cells showed vacuolization in the cytoplasmic portion on the 12th hour of the action of pyrantel pamoate, where as the fibrilian region of the muscle cells remained unchanged. The cuticle and the endothelial cells of the sexual tubes of both sexes indicated only a weak vacuolization and maintained their structure throughout the experiment. The fine structure of the nerve cords and the sexual products themselves showed no noticeable changes at all.

It is concluded that *T. canis* worms had taken up pyrantel pamoate via an oral route, resulting in initial intestinal changes.

Keywords: *Toxocara canis*, anthelmintics, pyrantel pamoate, nematoda, histology.