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A Morphological Study on the Effect of Liposomally Administered Albendazole on the *Trichinella spiralis* Muscle Stage in Mice

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The aim of the present morphological study is to establish the effect of the liposomally encapsulated and separately applied albendazol during the muscle stage of Trichinella infection. The therapy was applied once a week at doses of 24 mg/kg body weight for the liposome encapsulated albendazol, the separately applied albendazol and the control groups. The corresponding medications were injected intraperitoneally once a week. The treatment was started on day 35-38 after the infection when the larvae are localized in the muscle tissue (muscle stage of Trichinellosis). The efficiency of the conducted therapy is measured as follows: liposome-encapsulated albendazol shows a statistically significant efficiency of 69 percent for the 24 mg/kg dose while albendazol applied separately indicates a statistical significance of 36 percent for the 24 mg/kg dose. The pathomorphological impact obtained as a result from the action of the antihelminthics shows that in the different groups there are differences only as to the numbers of the living and dead larvae. According to pathomorphological changes of the capsules, the parasites and the spaces around them are identical both for the liposome-encapsulated and the separately applied albendazol. The muscle samples for the histological study were removed from the thoracic musculature of the experimental animals.

Key words: pathomorphology, liposomes, *Trichinella spiralis*, albendazole.