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SCANNING ELECTRON MICROSCOPIC STUDIES ON THE SCOLEX SURFACE OF HYDATIGERA KREPKOGORSKI (SCHULZ ET LANDA, 1934) LARVA

The authors studying the scolex of adults and larvae of cestodes by means of an electron microscope (TEM) observed polymorphous microtriches on its surface (Hess E., Guggenheim R., Z. Parasitenk. 53: 189—199, 1977 and many others). The polymorphism of microtriches was then confirmed also by scanning electron microscopic studies of the scolex surface (Featherston D. W., Int. J. Parasitol. 5: 615—619, 1975 and others). The authors assumed that the polymorphism of microtriches was associated with a certain function of microtriches which may serve for enlarging the absorption area, attaching of the worm and maintaining its position or even for a sort of secretion and protection against host cells (Hulínská D. et al., Folia parasit. (Praha) 25: 247—255, 1978).

The present orientation study of the scolex surface in *Hydatigera krepkogorski* (Schulz et Landa, 1934) larva was aimed at the detection of the presence or absence of microtriches on the rostellar portion, suckers and other portions of scolex. To our knowledge, there are no literary data available on this subject.

The larva of *H. krepkogorski* was obtained from the ventral cavity of spontaneously infected *Rhombomys opimus* Lichtenstein, 1923. On the basis of its morphology and some histochemical reactions it was determined as a not fully developed and non-infective larva (Schramlová J. et al., Folia parasit. (Praha) 27: 47—51, 1980).

The material was fixed in 3 % glutaraldehyde in 0.1M cacodylate buffer, dehydrated through graded ethanol series and transferred through ethanol-amyl acetate mixture to pure amyl acetate. It was dried using Andersen's critical point method.

The rostellum beared a double row of 32 straight hooks protruding from conspicuous folds. The rostellum was densely covered with microtriches of two types. The microtriches with blunt end prevailed, whereas those bent in form of a hook were less numerous. The suckers were also densely covered with cylindrical microtriches with blunt ends among which were dispersed the hook-like microtriches. The surface character and morphology of microtriches were identical both in rostellum and in suckers. The remaining portion of scolex, however, was found to contain only cyllindrical microtriches with blunt ends.

Jha and Smyth (Int. J. Parasitol. 1: 169 to 177, 1971) demonstrated branched and hooked microtriches on the rostellum of *Echinococcus granulosus*. In their opinion, this character of microtriches supports the hypothesis that the microtriches enable a better adherence of the scolex to intestinal mucosa of the host. Also Featherston (Int. J. Parasitol. 5: 615—619, 1975) found microtriches on the rostellar portion of *Taenia hydatigena* and detected even transverse connections between them. On the other hand, Ubelaker et al. (J. Parasit. 59: 667—671, 1973), who studied the scolex surface in *H. diminuta*, and found only one type of microtriches on the rostellum and suckers, pointed out that the polymorphism of microtriches may sometimes occur artificially during the preparation of the material and warned against a non-critical evaluation of this phenomenon.

In our case we found hook-like microtriches on the rostellum and suckers. We assume that this is no artifact and that the microtriches of this form aid the larva to attach in the intestine of the definitive host.

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