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ANTIGENIC SITES ON EGGS OF *ECHINOCOCCUS MULTILOCULARIS* FROM ALTERNATIVE DEFINITIVE HOST RECOGNIZED BY MURINE MONOCLONAL ANTIBODIES PREPARED AGAINST THE ADULT WORMS

Yuki SAKAGUCHI

Department of Parasitology
Faculty of Veterinary Medicine
Hokkaido Univesity, Sapporo 060, Japan

Since it is difficult to distinguish eggs of taeniid species morphologically, an immunological approach involving the antigenic site detection on these eggs was carried out using the indirect fluorescent antibody test (IFAT). *Echinococccus multilocularis* eggs from adult tapeworms collected from an alternative definitive host, the Mongolian gerbil, were examined using murine monoclonal antibodies prepared against the adult worm. Unfixed frozen section of the eggs were reacted by IFAT against four monoclonal antibodies, designated as EmA1, 2, 5 and 10 which had been shown to recognize *in utero* eggs by indirect immunoperoxidase tissue staining (IP). Contrary to expectations, specific fluorescence on the oncosphere of *E. multilocularis* eggs, was not observed. Antigenicity of *E. multilocularis* adult worms from alternative definitive host was compared with that of adult worms from the natural definitive host. It was found that the antigenicity of worms from different hosts was the same. Using electron microscopy it was observed that EmA1, 2 and 10 stained the egg capsule (EC) which is usually lost when the egg is discharged from the proglottid. These ultrastructural observations may thus explain the failure of these monoclonal antibodies to stain the eggs in IFAT by EmA1 and 10. EmA2 stained the outer embryophoric membrane (OE) as well as the EC. Since EmA5 indiscriminately stained nearly all regions of the worm, it is considered not to be useful in diagnosis. It was also shown that eggs retained their antigenicity after treatment with heat, ultra low temperatures, and 10% formalin. Since EmA2 stained the OE, it might proved to be useful in identifying the eggs of *E. multilocularis*.