Experimental Life Cycle of *Hypoderaeum conoideum* (Block, 1872) Diez, 1909(Trematoda: Echinostomatidae) Parasite from the North of Iran

A. FARAHNAK¹, H. AZIZI¹, I. MOBEDI¹, M.B. MOLAEI RAD¹, S. FARAHNAK¹

1. Dept. of Parasitology and Mycology, School of Public Health, Tehran University of Medical Sciences, Tehran, Iran

Introduction: Human Echinostomiasis is an intestinal disease caused by the members of family Echinostomatidae parasites. Although. Hypoderaeum conoideum is a common parasite that has been reported in many studies in the world, but no research has been found that surveyed the development of cercaria to adult stages in Iran. Objectives: The aim of the present research was to identify echinostomatidae cercariae emitted by Lymnaea palustris snails from Mazandaran province in the North of Iran based on the morphological and morphometrical characteristics of the different stages of the parasite life cycle in an experimental study. Materials & Methods: Echinostomatidae cercariae were collected from L. palustris (Gastropoda: Lymnaeidae) of the North of Iran. To collect metacercaria, 50 healthy snails were infected with cercariae experimentally (50 cercariae for each). To obtain the adult stage, 9 laboratory animals (3 ducks, 2 rats, 2 mice and 2 quails) were fed with 60 metacercaria for each. To identify parasites, the different stages of worm were examined using light microscope and then the figures were drawn under the camera Lucida microscope and measures were determined. Results: Averagely, 15 metacercaria were obtained from each snail that had been previously exposed with cercariae. Ducks presented worm eggs in feces after 10-15 days post-infection. Intestinal worms were collected and identified as H. conoideum on the bases of the figures and measures of cephalic collar, the number of collar spine, suckers diameter ratio, testes arrangement, etc. Conclusion: H. conoideum cercariae and adult worm are described. This is the first report of the different stages of the life cycle of this parasite in Iran.