

First indigenous case of human infection by *Bertiella* sp. (Cestoda, Anoplocephalidae) in Poland

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Cestodes of the *Bertiella* genus are mainly parasites of primates, rodents, dermopterans and Australasian marsupials in Asia, Oceania, Africa and the Americas. However, they may also cause accidental infections in humans. Generally, the definitive host's infection is caused by ingestion of the soil mite containing cysticercoid larval stage.

In the present study, we described the first indigenous case of human infection by *Bertiella* sp. in Poland. In the stool sample of a nine-year-old boy white flat tapeworm segments were found which were identified as gravid proglottids of anoplocephalid tapeworm by morphometric analysis. Moreover, round shape eggs of tapeworm with the average diameter about 40 μm and pyriform apparatus were detected in faecal samples of the child. In addidion, molecular methods were used to confirm recognition of *Bertiella* sp. (fragments of cytochrome c oxidase gene of 393 bp in length were amplified; the PCR product was sequenced, and the obtained sequence was compared to the sequences available in GenBank).

According the mother's explanation the boy did not travel abroad, especially to the areas of different climatic-environmental and sanitary-hygienic conditions. The infection was asymptomatic. The applied pharmacotherapy with praziquantel was effective. As a result of the treatment no proglottids as well as eggs were detected in stool samples of the child.

We believe that the infection described here was acquired most probably by accidental ingestion of food or fruits contaminated with infected oribatid mites (an intermediate host) presented in the soil of zoological garden.