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Acanthocephalans in Serbia: rare, but not unimportant

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ABSTRACT: As part of research activities focused on rodent helminth fauna in Serbia, over the course of the previous decade, we registered the presence of species with zoonotic potential, *Moniliformis moniliformis*, an acanthocephalan (or spiny-headed worm) intestinal parasite that primarily infects rats, mice and voles. The adult form of the species *M. moniliformis* was found in the small intestine of three individuals of the yellow-necked mouse (*Apodemus flavicollis*) in the localities of Donji Milanovac, Cer Mountain and Senokos. Another species of Acanthocephala, reported in earlier studies of *Spermophilus citellus* in Serbia, is *Macracanthorhynchus hirudinaceus*, which also has zoonotic potential. Data on human infection with the aforementioned acanthocephalans are scarce all over the world, including Serbia, but they should not be ignored. Considering that the presence of spiny-headed worms with zoonotic potential in our country was established during the last years of research, it is necessary to develop awareness of the potential risk for public health and actively monitor this group of helminths and their definitive hosts throughout the country. Regular deratisation and disinsection in order to regulate the number of populations of rodents and insects that transmit acanthocephalans among other helminths in urban areas, are of great importance for the prevention of infection with these helminths. Implementing basic hygiene measures, as well as maintaining a healthy environment are essential measures to prevent the transmission of infection to humans. These proposed activities are in line with the One health approach, which stands at the intersection of human, animal and environmental health.

Key words: Acanthocephala, zoonoses, rodents, One health

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