Muscle parasites in reindeer: 
differential diagnostics and Russian food safety legislation

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ABSTRACT:
Reindeer muscles and therefore meat can be affected by Protozoa, Arthropods or Helminthes. In October 2018, heard of reindeer of the Nenets breed of various sex-age groups (from 6 months to 7 years) was slaughtered in the Zapolyarny region of the Nenets Autonomous District. During the veterinary and sanitary examination in several carcasses (obtained from adult males and females), elongated whitish objects, not characteristic for deer the muscle tissue, were found. They were delivered to the Department of Parasitology SPbSAVM and studied macroscopically and microscopically in its native form and with lactic acid clearing. It was found that objects were of different lengths (ranging from 1 to 3 mm) with a width of up to 0.3 mm; they were motionless and had a cavity divided into chambers. Objects were assumingly identified as cysts of Sarcocystis rangi. To clarify the diagnosis, it is advisable to conduct a genetic and histological examination. According to the current "Rules of veterinary inspection of slaughter animals and veterinary and sanitary examination of meat and meat products" (approved by the General Directorate of Veterinary Medicine of the USSR Ministry of Agriculture on December 27, 1983), the meat invaded by Sarcocystis if not damaged can be sold without restrictions. The proposed by the Ministry of Agriculture, but not yet in force "Rules in the field of veterinary and sanitary examination of meat and other products of slaughter" (March 22, 2017), demand the use of such meat for the manufacture of canned food or cooked sausages.