

## Biliary giardiasis in raccoons

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Giardiasis is a intestinal parasitic disease of humans and many other animals species. Infections of the *Giardia* genus are one of the most common causes of the so-called waterborne diseases or foodborne diseases around the world. The invasion is mainly associated with damage and inflammation of the duodenal mucosa leading to persistent diarrhea, malabsorption disorders, and weight loss. Single reports (all concerning human cases) indicate possible parenteral localization of the parasite in the bile ducts, leading to chronic cholecystitis, cholecystolithiasis, and fat absorption disorders.

The aim of the study was to demonstrate the presence of *Giardia* in the biliary tract of raccoon (*Procyon lotor*).

The study was carried out on 34 raccoons, captured in the national park and then euthanized in

accordance with the law and environmental protection procedures. During the post-mortem examination, intestinal content, stool samples and bile from gallbladder were collected and then were tested using immunochromatographic antigen tests and direct smear method.

A positive result (antigen test) was obtained from 8 stool samples (23.5%) and 13 bile samples (38.2%).

Our study proved the usefulness of bile in the diagnosis of giardiasis using rapid antigen tests. Moreover, obtained results suggest that, *Giardia* can be localized both on the intestinal mucosa as well as in the bile ducts and the gallbladder and therefore this protozoa parasite could be potential etiological factor the liver diseases.