Giardia duodenalis Associated with Intestinal Metaplasia of the Stomach

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A 76-year-old female patient was admitted to our department for a 12-hour history of acute inferior dysphagia after a consistent meal. The patient had a history of post-caustic stricture in the distal third of the esophagus 15 years before. The stricture was efficiently dilated at that moment, the patient being free of symptoms until the current admission.

The upper endoscopy examination revealed in the middle third of the esophagus a food bolus impaction that was successfully removed using an endoscopic retrieval net. A short large fibrotic stenosis that was easily overpassed with the endoscope was described in the distal part of the esophagus. The stomach revealed multiple small sessile whitish areas highly suggestive of intestinal metaplasia of the stomach (Fig. 1). Multiple biopsies from the antrum and gastric body were performed. The histopathology examination of the gastric biopsies confirmed the presence of a moderate gastric atrophy with intestinal metaplasia (Fig. 2, H&E, x50). Furthermore, teardrop shaped Giardia trophozoites were described at the surface of the mucosal layer (Fig. 3, H&E, x400). No Helicobacter pylori microorganisms were detected in the biopsy specimens.

Giardia duodenalis (also known as G. intestinalis or G. lamblia) is a protozoan parasite especially common in areas with poor sanitary conditions, capable of producing sporadic or endemic diarrheal illness [1]. The prevalence rates vary between 2% to 7% in developed countries to over 30% in developing countries [2, 3]. The diagnostic tests include antigen detection assays, nucleic acid detection assays, and stool examination [4]. Giardia is usually found attached to the mucosa of the duodenum and proximal jejunum, but in abnormal circumstances such as chronic atrophic gastritis and intestinal metaplasia, can be found in gastric biopsy specimens [5].

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Conflicts of interest: None to declare.

REFERENCES