OPEN ACCESS

GAVIN PUBLISHERS

Journal of Tropical Medicine and Health

Case Report

Cataño JC and Machado FA. J Trop Med Health JTMH-122.
DOI: 10.29011/JTMH-122.000122

Dyphillobothrium Intestinal Obstruction

Juan Carlos Cataño[1*], Faber Albeiro Machado[2]

[1]Department of Internal Medicine, University of Antioquia School of Medicine, Colombia

[2]Department of General Surgery, CES University, Colombia

[*]**Corresponding author:** Juan Carlos Cataño, Department of Internal Medicine, University of Antioquia School of Medicine, Colombia. Tel: +57-43146175507; Email: kataju@hotmail.com

Citation: Cataño JC, Machado FA (2018) Dyphillobothrium Intestinal Obstruction. J Trop Med Health JTMH-122. DOI: 10.29011/JTMH-122.000122

Received Date: 28 February, 2018; **Accepted Date:** 7 March, 2018; **Published Date:** 16 March, 2018

Keywords: Abdomen Acute; Dyphillobothrium: Intestinal Obstruction; Intestinal Parasitosis

Case Report

A 50-year-old male, with a history of benign prostatic hyperplasia and moderate mental retardation, consulted for five days of fecal and flatus arrest, associated with distension and mesogastric abdominal pain. He denied fever or symptoms related to other systems, but was left in observation for medical management and studies. His vital signs upon admission were: blood pressure of 170/80 mmHg, pulse 120 per minute, respiratory rate of 26 per minute, oxygen saturation of 93% in room air and temperature of 37C. On physical exam he looks pale but not toxic, no pulmonary or cardiac abnormalities were found on auscultation (except for tachycardia), but the abdomen was distended, painful to deep palpation, and without signs of peritoneal irritation. Two hours later he starts with copious fecaloid vomit, and an X-ray of the abdomen was taken in an upright position, which ruled-out pneumoperitoneum, and only showed the presence of several air-fluid levels, due to which a nasogastric tube was placed, obtaining 300 cc of fecaloid liquid, but the distention and abdominal pain increases despite the nasogastric tube, so he went to surgery and an exploratory laparotomy was performed, showing that intestinal obstruction was caused by a severe intestinal parasitosis (Figure 1A), which was solved after the extraction of the 88 cms parasite (Figure 1B), which was sent to pathology for its better characterization, determining that it was a Dyphillobothrium spp. massive infestation (Figure 1C and Figure 1D). All simptoms improved after surgery without any post-surgical complications.

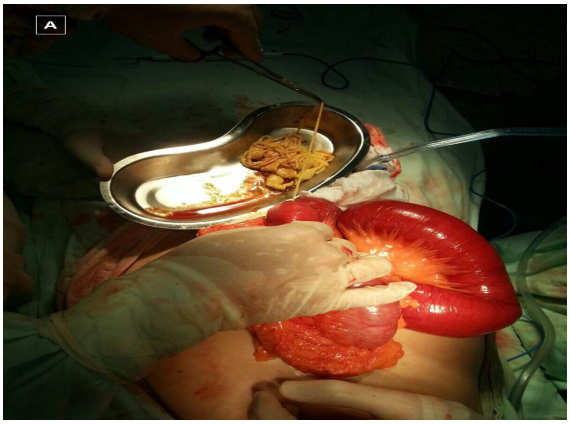

Figure 1A: Intraoperative moment in which the intestinal parasite is being extracted.

Figure 1B: Intestinal parasite completely removed, which was 88 cm long.

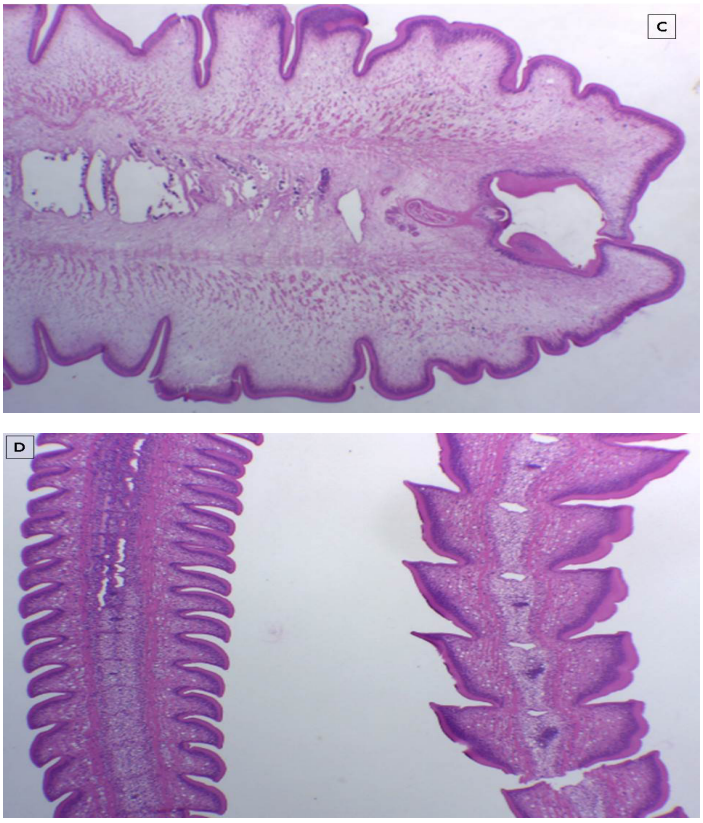

Figure 1C and 1D: Histopathological sections at 40 X and 10 X, respectively, showing the anatomical structure of the parasite, consistent with Dyphillobothrium spp.

Tapeworms (Cestoda) continue to be an important cause of morbidity in humans worldwide. Diphyllobothriosis, a human disease caused by tapeworms of the genus *Diphyllobothrium*, is the most important fish-borne zoonosis caused by a cestode parasite. Up to 20 million humans are estimated to be infected worldwide [1]. Besides humans, definitive hosts of Diphyllobothrium include piscivorous birds and mammals, which represent a significant zoonotic reservoir. The second intermediate hosts include both freshwater and marine fish, especially anadromous species such as salmonids. The zoonosis occurs most commonly in countries where the consumption of raw or marinated fish is a frequent practice [2].

Due to the increasing popularity of dishes utilizing uncooked fish, numerous cases of human infections have appeared recently, even in the most developed countries. As many as 14 valid species of *Diphyllobothrium* can cause human diphyllobothriosis, with D. *latum* and D. nihonkaiense being the most important pathogens [3].

References

1. Scholz T, Garcia HH, Kuchta R, Wicht B (2009) Update on the human broad tapeworm (genus diphyllobothrium), including clinical relevance. Clin Microbiol Rev 22:146-60.

2. Kuchta R, Brabec J, Kubáčková P, Scholz T (2013) Tapeworm *Diphyllobothrium dendriticum* (Cestoda)--neglected or emerging human parasite?. PLoS Negl Trop Dis 7:e2535.

3. Zhang W, Che F, Tian S, Shu J, Zhang X (2015) Molecular Identification of Diphyllobothrium nihonkaiense from 3 Human Cases in Heilongjiang Province with a Brief Literature Review in China. Korean J Parasitol 53: 683-688