

PICTURES IN DIGESTIVE PATHOLOGY

Taenia saginata: An imported case

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INTRODUCTION

In developed countries, such as Spain, parasitic infections have some interest in cases due to immigration, travel to endemic countries, and international adoptions.

CASE REPORT

Male, 33-year-old, Spanish, civil engineer who has lived 18 months in Ivory Coast for work. Currently, he has returned to Spain and has perianal itching and diffuse cramp-like abdominal pain. There is no fever, he has diarrhea, and his latest bowel movement suggests the presence of a large worm.

The examination revealed mild pain on deep palpation of the right iliac fossa. The tests show slight eosinophilia (750 eosinophils per microliter).

The macroscopic view of the parasite suggests *Taenia* (Fig. 1). Microbiological analysis describes it as *Taenia saginata* (*T. saginata*).

DISCUSSION

Tapeworms cause two types of infection in humans, depending on whether the person is the worm's intermediate



Fig. 1. Macroscopic view.

or permanent host. In the case of the latter, the tapeworm is an adult individual that inhabits the small intestine, such as *T. saginata* (1).

The cow, acting as intermediate host, ingests the eggs present in the soil and the larvae develop in the cow's tissues. The person, being the permanent host, ingests the meat of the animal, undercooked (kebabs, steak tartare) and develops the worm in its adult form (Fig. 2).

Most cases are asymptomatic. Sometimes there may be cramp-like abdominal pain, constipation or diarrhea, and peripheral eosinophilia.

The collection of three different stool samples every other day is recommended. By injecting Indian ink in each proglottid,

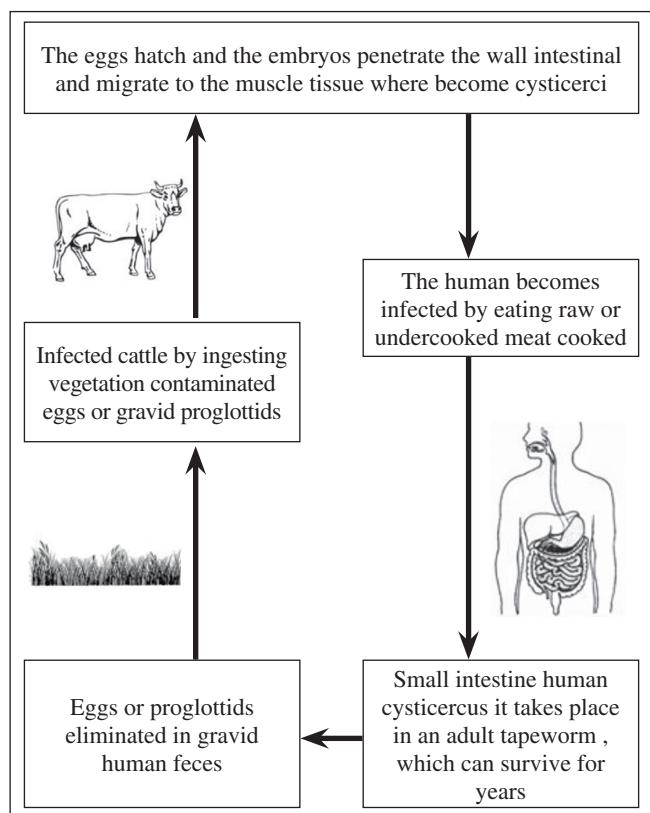


Fig. 2. Parasitic cycle of *Taenia saginata*. Extracted and amended of: Tapeworm (Cestode) Infection (Beef): *Taenia saginata*. Netter's Gastroenterology 2010;181:472-3 (2).

it is possible to see its uterine invaginations using a microscope (Fig. 3) and thus reach a final diagnosis.

Depending on the number, if it is between 7 and 13, it is *T. solium*; if between 15 to 20, it is *T. saginata* (3).

The treatment of choice is Praziquantel pods.

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Fig. 3. Microscopic view of proglottids.