

## *Taenia Saginata* Tapeworm Infection in a Traveler to Mexico

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A 29-year-old, Ethiopian-born, female student in her fourth year at a local college traveled from Houston to Mexico City during a Christmas vacation. While in Mexico City, she recalled eating uncooked beef. Several weeks after returning to Houston, she noticed white, moving objects in her stool. The objects were flat and variable in length, up to several centimeters. She was concerned that the objects were parasites and came in for evaluation. She was presumptively treated with niclosamide, 2 g by mouth, followed by a purgative of magnesium citrate. Within 1 hour, she passed 20 tapeworm proglottids, which initially were noted to be motile (Fig. 1). Examination of proglottids confirmed that the worm was a *Taenia saginata*.

### Comments

Approximately 48 million people worldwide are infected with tapeworms, the vast majority of which are *T saginata*.<sup>1</sup> The infection is acquired by ingesting raw or undercooked beef infected with the cyst stage of the parasite. Although the conventional belief is that tapeworm infections are associated with weight loss, no clinical or experimental data support this contention. Indeed, most cases are asymptomatic. Symptomatic patients, such as this woman, may describe white motile "worms" in their stool. The parasites

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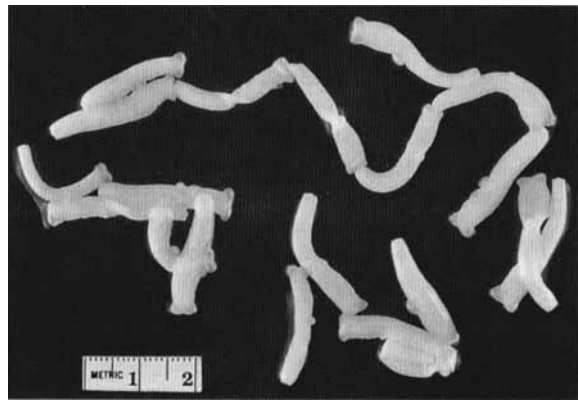


Figure 1 *Taenia saginata* tapeworm proglottids.

can be distinguished clinically from *Ascaris* and other roundworms by their flat shape. Stool examination for ova is often negative.<sup>2</sup> Since empiric therapy is safe, and in many cases less expensive than laboratory tests, one option for management is empiric therapy, as was done in this case. Niclosamide (4 500 mg tablets chewed as single dose) is effective in this setting.<sup>1</sup> Alternative medications include praziquantel or albendazole.<sup>1</sup> Tapeworm infection is unusual in travelers. As illustrated by this case, however, travelers to developing countries need to be cautioned about ingesting undercooked meats.

### References

1. Tanowitz HB, Wittner M. Tapeworm infections. In: Strickland, ed. Hunter's tropical medicine. Philadelphia: WB Saunders, 1991.
2. Deplazes P, Eckert J, Pawlowski ZS, Machowska L, et al. An enzyme-linked immunosorbent assay for diagnostic detection of *Taenia saginata* copro-antigens in humans. Trans R Soc Trop Med Hyg 1991; 85:391-396.