

Case Report

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## ***Taenia saginata* Anchored to the Duodenum Presenting with Hematemesis in a Healthy Adult Male**

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### **Abstract**

**Introduction:** *Taenia saginata* is found all over the world, for example; Sudan, Great Britain, China, Iran and Indonesia. It infects people with poor hygiene.

**Case Presentation:** This case report is about the finding of a tape worm (*Taenia saginata*) anchored to the mucosa of the second part of the duodenum in a healthy adult male. It presented with hematemesis for which esophago-gastro-duodenscopy was done. No part of the worm was seen by the patient in the stools.

**Conclusion:** the worm was removed by the scope and treatment was given to the patient who remained well on follow up.

**Keywords:** Tape worm in duodenum; Tape worm in stomach; Hematemesis; Gastroduodenoscopy

### **Introduction**

Infection with *Taenia saginata* occurs in all parts of the world including Britain, Sudan, China, Iran and Indonesia [1]. No significant symptoms are caused by this worm a part from mild, vague discomfort. Usually parts of the tape worm are passed with the stools and this is considered to be the commonest symptom. This is because the worm has very little contact with the mucosa without causing any immunological response from the body [2].

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### **Case Report**

A thirty one year old male, who is a laborer from a low socio-economic class, was admitted to M S Idris GIT bleeding centre in Khartoum, Sudan complaining of hematemesis for one day. The amount of hematemesis was small, the blood was red with no clots and he vomited once. There was no malena. This episode of hematemesis was preceded by nausea and epigastric discomfort for about a month for which the patient did not see a doctor and took no treatment. The patient did not notice any parts of the worm in his stools. He had no other health problems.

On examination he looked well, not anemic or jaundiced. His abdomen looked and felt normal with no epigastric guarding or tenderness. The laboratory investigations



**Figure 1: *Taenia saginata* anchored to the duodenal mucosa.**

were all normal, including stool general which was done after the endoscopy.

Upper GIT endoscopy was done. No inflammatory or neoplastic lesion was found but a long, white object was seen extending from the stomach to the duodenum. On close scrutiny it was recognized as a tape worm. The head was gripping the duodenal mucosa of the second part firmly (Figure 1). The body ran through the pyloric canal, which was kept open, up to the proximal part of the stomach (Figure 2). The worm was identified in the laboratory as *Taenia saginata*.

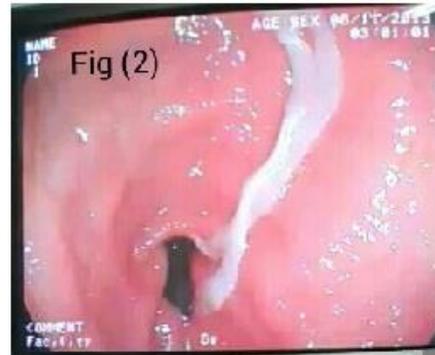
## Discussion

### *Rarity of this finding*

Only three reports were found in the literature by searching the internet in which this worm was found in the stomach and duodenum. Only in one of these cases [3] there was atrophic gastritis, but in the present case and the other cases there was no atrophy of the gastric mucosa. This implies that the worm must be resistance to gastric juice digestion.

### *Comparison of presentation between the cases*

One of the cases presented with haematemesis and malena [3]. A female patient of 80 years was complaining of epigastric pain only. The second patient was



**Figure 2: *Taenia saginata* seen extending from the open pylorus to the stomach.**

also a female of 54-years, complaining of dyspepsia, epigastric pain, nausea and vomiting on and off for two months [4]. The third was a 60 year female patient presented with hematemesis and malena [5] and again one year later she presented with epigastric discomfort and no bleeding. In both presentations she was found to have *Taenia* in the stomach. All these three patients had normal findings on clinical examination apart from anemia.

### *A problem in removal*

In the present case the worm was held by a biopsy forceps near its head and pulled to release it from the duodenal wall but it was cut. Again the head was held and removed with the rest of the worm.

## Conclusions

The patient in this case report was given praziquantel, 10 mg/kg. Stool analysis and endoscopy follow up after one month was normal.

### *Learning points*

- *Taenia saginata* can reside in the stomach and duodenum in spite of the digestive enzymes.
- It can present with hematemesis and/or malena or other upper gastro-intestinal symptoms.

- Passage of parts of the worm with stools may not occur even if the worm is very long.

### Consent

Written informed consent is obtained from the patient for publication of this case report.

### Competing interests

The author declares that there is no competing or conflict of interest.

### Author contribution

The author did the endoscopy, took care of the patient and followed him up. He did the literature search and wrote the article.

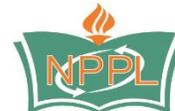
### Acknowledgement

Thanks to Dr. Isam Ali Ahmed who took the film.

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