

# TONGUE ENDOMETRIOSIS SHOULD BE INCLUDED IN THE DIFFERENTIAL DIAGNOSIS OF HEMATEMESIS

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## Abstract

Gastrointestinal bleeding (GIB) in pediatric patients can arise from a variety of underlying conditions. Current estimates indicate that the prevalence of GIB in children is approximately 6.4%, with about 80% of cases resolving spontaneously. However, the initial assessment and management are critical in influencing the overall prognosis. The primary focus should be on stabilizing the patient's hemodynamic status, followed by a comprehensive diagnostic evaluation. GIB may originate from either the upper or lower gastrointestinal tract, resulting in a wide differential diagnosis in infants and children. This differential includes both benign, self-limiting conditions and more serious disorders that require urgent intervention. Endometriosis should be included in the differential diagnosis of hematemesis. Endometriosis is a chronic gynecological condition characterized by the presence of endometrial glands and stroma located outside the uterine endometrium. This condition affects approximately 10 to 15% of women of reproductive age, with the ovaries being the most common site of involvement. At the extra pelvic level, the gastrointestinal and genitourinary tracts are the most frequently affected areas; however, endometriosis can develop in a variety of locations throughout the body. An 11-year-old female patient presented with hematemesis lasting four days, which coincided with the onset of her menstrual cycle and subsequently ceased. A diagnosis of endometriosis was established. Extra-pelvic endometriosis is rare, and accurate diagnosis necessitates both experience and specialized training in recognizing normal endometrial tissue. This case is significant as it represents the first reported instance of endometriosis located at the base of the tongue.

**Keywords:** Diagnosis, Endometriosis, Hematemesis, Tongue.

## I. INTRODUCTION

Hematemesis is typically associated with upper gastrointestinal bleeding (GIB), which occurs proximal to the ligament of Treitz. In contrast, lower gastrointestinal bleeding, occurring distal to the ligament of Treitz, often presents as bloody diarrhea or the passage of bright red blood that may mix with or coat normal stool. It is important to note that melena, hematochezia, and dark or occult bleeding can arise from both upper and lower gastrointestinal sources.

Specifically, while melena generally indicates upper GIB (such as from the esophagus, stomach, duodenum, and proximal jejunum), in immunocompromised patients with slow intestinal transit, it may also originate from bleeding in the small bowel or colon. Similarly, hematochezia, which is commonly indicative of bleeding from the distal small bowel or colon, can also result from significant bleeding in the upper digestive tract due to the cathartic effect of large blood volumes in the intestinal lumen, which can accelerate intestinal transit (1,2,3).

Endometriosis, characterized by the presence of endometrial tissue outside the uterine cavity, affects approximately 10% of women of reproductive age and is associated with immunological factors that contribute to its inflammatory nature. Patients may experience symptoms such as dysmenorrhea, chronic pelvic pain, dyspareunia, and infertility; however, hematemesis is a rare occurrence in those affected (4).

## II. MATERIAL AND METHODS

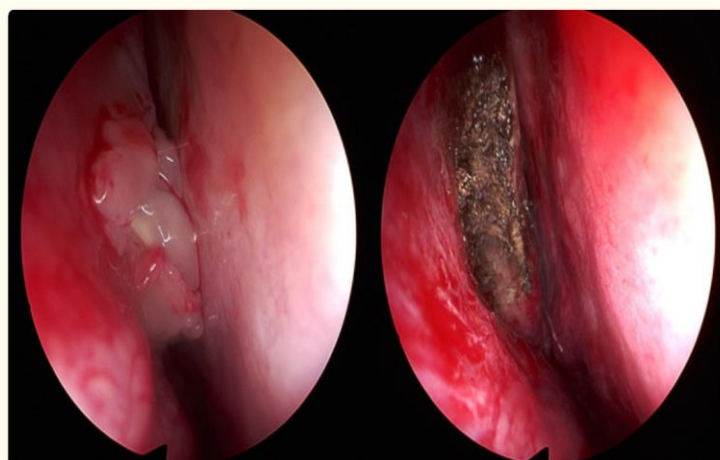
### A. CASE DESCRIPTION

The patient was presented with recurrent episodes of hematemesis, occurring consistently for four days each month. We began considering common causes of this symptom, which may include gastritis, stomach ulcers, gastroesophageal reflux disease (GERD), and oesophageal irritation resulting from excessive vomiting or coughing. Less common causes may encompass oesophageal or stomach cancer, blood disorders such as haemophilia, certain medications—including aspirin, non-steroidal anti-inflammatory drugs (NSAIDs) like ibuprofen, and anticoagulants—as well as poisoning. Additionally, it is possible for blood to be vomited that has been swallowed, such as from a nosebleed.

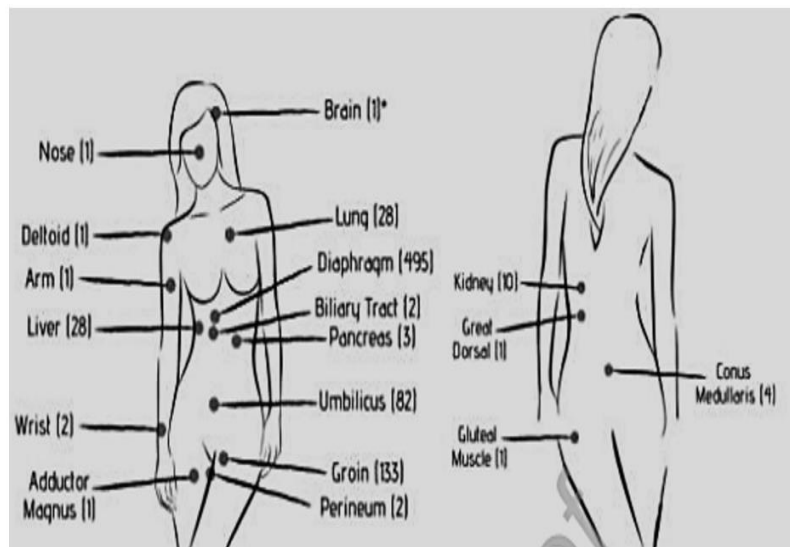
The patient underwent a comprehensive gastrointestinal evaluation including endoscopy and baseline investigations, all of which returned normal results, effectively ruling out gastrointestinal tract causes. Haematological causes were excluded as well, given that extended coagulation and bleeding profiles were also normal. There is no documentation of any previous medication use or underlying medical conditions. Furthermore, the potential for fabricated causes was eliminated, as the episodes occurred in the presence of the medical team.

After conducting a thorough medical history, I observed that the hematemesis coincided with the patient's menstrual cycle and subsequently resolved. This unusual presentation led to a referral to a gynaecologist, who performed an additional endoscopy and collected samples for histopathological examination. Notably, endometrial tissue was discovered at the base of the patient's tongue. The condition was effectively treated with cauterization, leading to a successful resolution.

### B. FIGURE/VIDEO



**Fig 1: Cauterization of endometrial tissue**



Source: Andrés MP; Arcoverde FV; Souza CC; Fernandes LFC; Abrão MS and Kho RM.

Figure 2. Reported extrapelvic sites of endometriosis [In parentheses, number of cases reported to date].

### C. PATIENT'S PERSPECTIVE

Over the past three months, my daughter has been experiencing recurrent episodes of hematemesis with no identifiable cause. Despite undergoing numerous investigations and imaging studies, we did not see any improvement. However, following a cauterization procedure, she has ceased experiencing bloody vomiting.

### III. CONCLUSIONS

This case report seeks to encourage all paediatricians and gynaecologists to consider the diagnosis of endometriosis when evaluating patients of reproductive age who present with hematemesis. Additionally, it is crucial to perform a comprehensive clinical-pathological correlation to establish a robust diagnosis, thereby facilitating the delivery of appropriate treatment for the patient.

### Acknowledgement

Tongue endometriosis should be included in the differential diagnosis for hematemesis.

### References

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