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A Case Report of Abdominal Wall Endometriosis with Manifestation of Abdominal and Back Pain

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Article Type	ABSTRACT
Case Report	Background and Objective: Endometriosis is defined as the presence of endometrial glands and
	stroma somewhere outside the uterus. The most common site of involvement is the small intestine
	and colon, and gastric wall involvement is rare. In this study, a case of gastric endometriosis with
	submucosal mass is reported.
	Case Report: The patient is a 44-year-old woman who referred with abdominal and back pain for 2
Received:	months. Pain was not associated with menstruation and no tenderness was seen on abdominal
Jan 14 th 2021	examination. On CT scan, a 3×3 cm mass was reported and surgery was performed. During surgery,
Revised:	pelvic adhesion was seen and there was complete adhesion of the stomach, intestines, and ovaries to
	each other. In the frozen sample, endometriosis was reported. Due to the extensive involvement, the
Mar 27 th 2021	patient underwent medical treatment.
Accepted:	Conclusion: According to the results of this case, endometriosis may be seen in any area.
May 2 nd 2021	Keywords: Endometrial, Pelvic Adhesion, Menstrual Cycle.

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Introduction

Extra-pelvic endometriosis occurs in approximately 10% of cases in areas such as the intestines, genitourinary tract, kidneys, lungs, and skin (1). However, there are rare cases of endometriosis in the stomach (2). Endometriosis affects 5% of the gastrointestinal tract. The most common site is the sigmoid and then the rectum (3).

This ectopic tissue is cyclically stimulated by ovarian hormones, and an inflammatory response is induced by recurrent bleeding, leading to reactive muscle proliferation, fibrosis, and adhesions. This lesion eventually leads to distressing symptoms such as abdominal pain, dyspareunia, dysmenorrhea, back pain and even chest pain. Chronic pelvic pain can be severe and reduce the quality of life in these women (4, 5).

Surgery varies from local lesion removal to segmental or anastomosis in cases of multiple foci. A general surgeon or gastroenterologist should assist the gynecologist in cases of gastrointestinal involvement (6, 7). In this article, we present a case of gastric endometriosis that has manifested itself by submucosal mass. Since this is clinically and locally rare, this report can be useful as an experience for colleagues in similar cases.

Case Report

This case report was approved by the ethics committee of Qazvin University of Medical Sciences with the code IR.QUMS.REC.1400.131. The patient was a 44-year-old woman with subcutaneous gastric mass on endoscopy and CT scan who referred with low back pain and gastric pain from two years ago, which had recently worsened. The patient had no child. She was not nauseous. Pain was not related to menstruation. On abdominal examination, no tenderness was felt.

CT scan showed a mass with a specific size of 3×3 cm below the gastric mucosa, the first differential diagnosis of which was gastrointestinal stromal tumors. Endoscopy showed a submucosal mass and biopsy was taken for pathology. The pathology specimen showed only gastritis and no mass was seen in the specimen.

The surgery was performed by a general surgeon. During surgery, the stomach, intestines, and ovaries were adhered together. With detection of extensive pelvic metastasis, samples were sent for pathology by frozen section examination. In the frozen sample, a background of fibrous tissue with fragments of compressed ovarian stroma with endometrial glands were seen (Figure 1).

The sample was small $(1 \times 1.5 \text{ cm})$ and no gastric tissue was seen, but the surgeon described the location of the sample as gastric region. Areas of hemosiderin deposition were also seen. In the results of frozen section examination, endometriosis was reported (gastric wall mass biopsy [frozen section]: endometriosis).



Figure 1. Microscopic view of endometrial glands and stroma beneath gastric mucosa

Discussion

Gastric endometriosis is rare condition. Our patient did not have the typical symptoms of endometriosis and this differential diagnosis was not relevant to him. The gastric wall is a very rare site for endometriosis and should be differentiated in women who refer with acute abdominal and gastric pain. Presentation of a mass with definite range suggested gastric stromal tumors, but during surgery, severe gastric and intestinal adhesions suggested pelvic metastasis. Clinically speaking, the symptoms of endometriosis should not be considered merely based on definitive signs. Finally, only surgery and biopsy of the lesion and examination of its pathology should be used to make a definitive diagnosis (8). Similar cases are often reported in the colon, as reported by Kanthimathinathan et al., where a case of endometriosis was infiltrative or multifocal in the colon (3).

In a study by Ha et al., a case of endometriosis in the gastric wall was reported in the form of a submucosal mass similar to that of our patient but in the area of large curvature (1), which had specific range similar to that of our patient. However, there was not much adhesion and severe abdominal pain in this patient and the diagnosis of metastasis was not clinically relevant for the patient. Kashyap et al. also reported a case of submucosal endometriosis in the stomach wall in which a 44-year-old patient was accidentally discovered with a 2 cm mass in the posterior wall of the stomach and the patient had no complaints of pain (9). A different point in our patient was the adhesion of pelvic components to each other and the presence of back and abdominal pain in the patient, which is similar the clinical diagnosis of most cancers, and metastasis was suggested after observation during surgery. Other cases of endometriosis in the wall of the stomach have all been submucosal as in our sample (1, 9, 10).

Although histopathological confirmation is the gold standard for diagnosis, imaging techniques such as ultrasound or CT scans are non-invasive devices for initial examination. The need for surgery depends on the location of the lesion, its size, its range, or its multifocality (10). Due to the rarity of the lesion, similar experiences have been less common. Reported cases were treated with complete resection of the lesion with

a margin of 1 cm (1, 9). In our patient, due to extensive adhesions to the intestine and ovaries, surgical removal of the lesion was not possible and the patient underwent medical treatment. Due to the rarity of this lesion and its related symptoms in this patient, presenting it in similar cases would be a useful experience for colleagues.

Ethical considerations: The patient's name was not mentioned in the article.

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