Introduction

Endometriosis is defined as the presence of normal endometrial tissue outside of the uterine cavity and myometrium. It's a common disease that affects about 6%-10% of reproductive-age women. The ovaries, uterine ligaments, rectovaginal septum, cul-de-sac, pelvic peritoneum, colon, and appendix, in that sequence, can all be affected by endometriosis. Intestinal endometriosis accounts for 3%-37% of all intestinal cases, while the small bowel is only involved in about 10% of all intestinal endometriosis cases. Endometriosis-related small intestine obstruction, on the other hand, occurs in less than 7% of patients. Surgical excision is only required in roughly 1% of these cases. In different studies, the incidence of endometriosis in the appendix ranges from 0.2% to 1.3%. According to these data, endometriosis causing small intestine obstruction with accompanying appendiceal endometriosis is an extremely rare clinical event. As a result, we present a case of endometriosis-related small bowel obstruction. It's worth mentioning that most cases are only found after surgery.

Keywords: Endometriosis • Uterine ligaments • Molecular histology • Medical physiology

Case Presentation

The main complaint of a 41-year-old lady who went to the emergency room was stomach pain. The patient had been experiencing stomach pain for over two months, with the ache in her right lower abdomen becoming increasingly severe. Based on a physical examination, pertinent test results, and radiographic studies, the ED physician made the clinical diagnosis of small bowel obstruction. An abdominal X-ray and a CT scan of her abdomen and pelvis revealed brief lengths of thickened small intestine wall and dilated bowel loops, which were consistent with a clinical diagnosis of small bowel obstruction.

Pathology

The specimen was a 23 cm length of small bowel with an outer diameter varying from 4 cm to 6 cm. The mucosa of the intestine was erythematous, with edema in isolated areas. On the intestinal wall, which reached a maximum thickness of 2.2 cm, there were several loops of adherent serosa and multifocal patches of thickened muscularis externa. The appendix was also sent to our lab as a separate specimen. The appendix was completely uninspiring. Histologic Hematoxylin and Eosin (H&E) slices of the small intestine revealed many areas of endometrial tissue within the muscularis externa. In certain areas, microscopic examination revealed benign endometrial glands and stroma, as well as active bleeding and hemosiderin laden macrophages. Appendix sections revealed endometrial glands and stroma. Endometriotic lesions were discovered in the mesoappendix and appendiceal wall.

Discussion

The aetiology and pathology of endometriosis have been the topic of different theories proposed by various authors. The metastatic theory of endometrial tissues spreading via blood or lymphatic channels, the metaplastic development theory of coelomic epithelium transforming into endometrial tissue and the most current stem cell theory of bone marrow stem cells differentiating into endometrial tissue. Regardless of the explanation experts subscribe to, patients still suffer the clinical repercussions of this illness. This is largely due to the difficulties of obtaining a non-invasive clinical diagnosis. Intriguing new research, on the other hand, sheds new light on the development of non-invasive diagnostic laboratory tests for endometriosis confirmation.