Poster
PE 026

International Surgical Week
The World's Congress of Surgery
isw2024.org
Kuala Lumpur, Malaysia
25-29 August 2024

Uncommon Presentation of Acute Abdomen in Pregnancy–Appendicular Deciduosis: A Case Report

Mohamed Izzad Isahak[1], Muhammad Safwan Abdullah[1], Ahmad Ramzi Yusoff[1], Nora Julianna Osman[1]

1. Department of Surgery, Hospital Al-Sultan Abdullah, Universiti Teknologi Mara UiTM Puncak Alam, Malaysia

Abstract

We present a rare case of appendicular deciduosis in a pregnant lady. Deciduosis may develop during pregnancy in the appendix resulting in occlusion of the appendicular lumen by extrinsic compression either due to expansion of endometrial tissue or decidua polyp formation. We report a 33-years-old lady at 33 weeks of gestation presented with sudden onset of right sided pain for 2 days. Clinically patient had tenderness at right lumbar region with rebound tenderness. The diagnosis of acute appendicitis was suspected and after successful laparoscopic appendicectomy, the histopathological examination of specimen revealed a diagnosis for appendicular deciduosis was established. This case underscores the importance of considering unique pathological entities in the differential diagnosis of acute abdomen during pregnancy.

Introduction

Appendicular deciduosis is a rare condition characterized by the presence of ectopic decidual tissue in the appendix.(1) This ectopic tissue can obstruct the appendicular lumen, either through extrinsic compression from expanding endometrial tissue or by forming decidua polyp.(2)(4) The resulting clinical presentation can closely resemble acute appendicitis, making accurate diagnosis difficult.

Case Presentation

A 33-year-old primigravida woman at 33 weeks of gestation presented to the emergency department with sudden onset of right sided abdominal pain for 2 days. There was no history of fever, nausea, vomiting, or urinary symptoms. Patient had otherwise an uneventful pregnancy.

On physical examination, the patient was afebrile with stable vital signs. Abdominal examination revealed tenderness at right lumbar region with rebound tenderness. The total white cell count was 10 10/L, and C-reactive protein levels were 40mg/L. Ultrasound of the abdomen showed single live intrauterine foetus with the appendix not visualized. Her urine analysis was normal.

A diagnosis of acute appendicitis was suspected, and urgent laparoscopic appendectomy was done. Intraoperatively, the appendix appeared mildly inflamed, and there was no evidence of perforation or abscess. The appendix was successfully removed laparoscopically without complications. The postoperative course was uneventful, and her symptoms resolved postoperatively.

Histopathological examination revealed mildly congested appendix measuring 85mm in length and 8mm in diameter. There was no transmural inflammation of the appendix but there was focal decidual tissue seen on the serosal. There were also few reactive lymphoid follicles seen within the lamina propria.

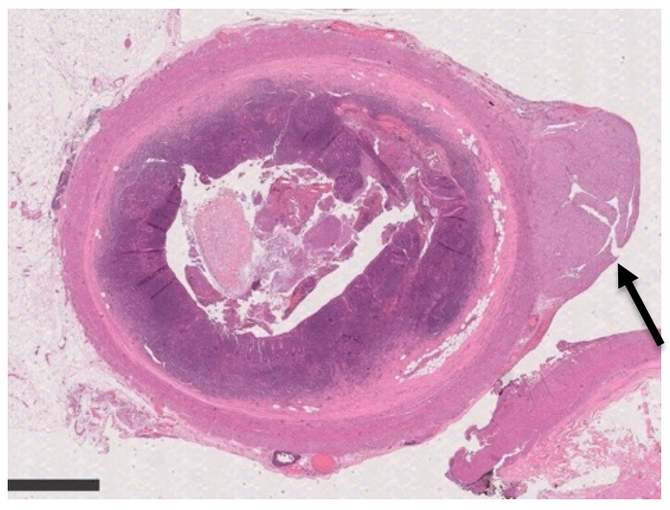

Figure 1 : Section of appendix with presence of ectopic decidua tissue on serosal surface (black arrow)

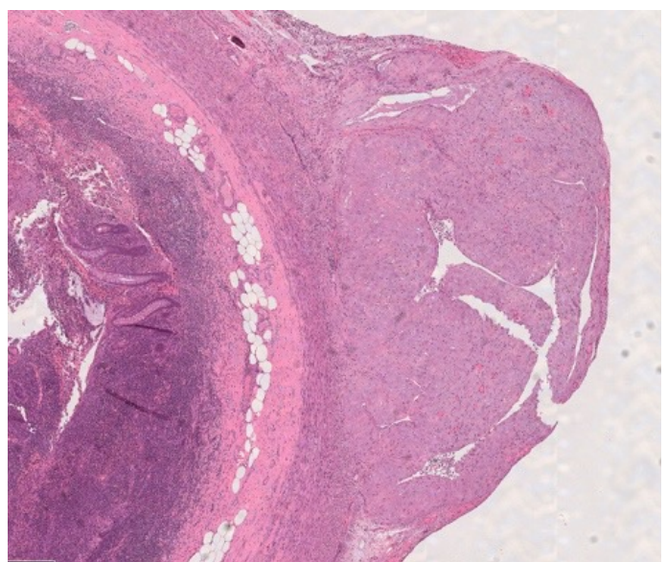

Figure 2 : Decidua tissue characterized by large, rounded cells with abundant pale eosinophilic cytoplasm, large bland nuclei with prominent nucleoli

Discussion

Appendicular deciduosis is a rare condition that occurs when ectopic decidual tissue is found in the appendix.(1) Decidual tissue typically forms in the endometrium during pregnancy in response to hormonal progesterone changes, but in rare cases, it can develop in ectopic locations, such as the appendix, ovaries, cervix, and even the bladder.(3)

The clinical presentation of appendicular deciduosis can mimic acute appendicitis, as seen in our case. The symptoms of right-sided abdominal pain and tenderness, along with laboratory findings of elevated inflammatory markers, often lead to a preliminary diagnosis of acute appendicitis. Imaging studies, such as ultrasound, may or may not show features suggestive of appendicitis due to its displacement by the gravid uterus. Definitive diagnosis is usually achieved postoperatively through histopathological examination.

Management of appendicular deciduosis typically involves surgical intervention.(4) In our case, the laparoscopic approach allowed for both diagnostic confirmation and therapeutic management with minimal complications.

Conclusion

We report a case of acute appendicitis due to deciduosis. This case underscores the importance of considering rare pathological entities as differential diagnosis of acute abdomen during pregnancy. Although uncommon, awareness of this condition can aid in accurate diagnosis. Treatment is surgical and definitive diagnosis is performed by histopathology analysis.

Reference

1.Bolat F, Canpolat T, Tarim E. Gebelik ile ilişkili peritoneal ektopik desidua (Desiduozis): Morfolojik ve klinik değerlendirme. Turk Patoloji Dergisi/Turkish Journal of Pathology. 2012;28(1):56–60.
2.Murphy SJ, Kaur A, Wullschleger ME. Endometrial decidualization: a rare cause of acute appendicitis during pregnancy. J Surg Case Rep. 2016;2016(4).
3.Ghannouchi M, Nacef K, Khlifa M Ben, Iyed K, Boudokhan M, Toumi D, et al. Acute abdomen during pregnancy: Appendicular deciduosis-a case report. J Surg Case Rep. 2021 Oct 1;2021(10).
4.Smits L, Bockstal M Van, Frezin J. Deciduosis of the appendix: a rare cause of acute abdomen during pregnancy (a case report). Pan Afr Med J. 2020;37:316.