

Postpartum Fever: a common diagnosis at an uncommon time

Joseph W. Cherri, D.O.

Department of Family Medicine, University of Nebraska Medical Center, Omaha, NE 68198

Introduction

- Family Practice Physicians are commonly the first contact for postpartum complications after hospital discharge.
- Postpartum Fever Definition: Temp >38C on any 2 of first 10 days postpartum, not including first 24 hours.
- Fever during the postpartum period is frequently caused by pregnancy-related events. The differential includes: surgical site infection, endometritis, mastitis/breast abscess, UTI, Septic Pelvic Thrombophlebitis, C. dif infection, and Drug Fever.¹
- Appendicitis is not typically included in the postpartum fever differential due to the infrequency of occurrence.
- Though the rates of Antepartum appendicitis are highest during the second trimester (40% of cases) when compared to third trimester (34%) or first trimester (25%)², there is no data available detailing the frequency of postpartum fever caused by appendicitis. Few case reports have been published describing appendicitis during the postpartum period.³
- This case demonstrates the importance of a broad differential on initial patient presentation which should always include common diagnoses even if it is during an uncommon time.

Patient Presentation

29 y.o. G8P3124 female, PMHx of hypothyroidism and prior c-section - initially presented to outside hospital **8 days post uncomplicated VBAC with fever, chills, and RLQ pain x1 week**. She denied any nausea, vomiting, diarrhea, dysuria, or hematuria.

• Workup at Outside Hospital:

- o Temp: 100.9F
- o WBC: 14,000 & CRP: 300- Negative lipase and Procalcitonin
- o Pelvic Ultrasound: hepatosplenomegaly, cholelithiasis without evidence of cholecystitis, **heterogenous debris - unable to rule out endometritis**
- o Initial Treatment: given dose of Rocephin for suspected endometritis and transferred to BMC

On presentation to BMC:

- **Vitals**: Afebrile, stable and WNL
- **Physical Exam**: RLQ TTP and guarding, no rebound or rigidity
- **Labs**: No evidence of UTI or STI, Blood Cultures obtained
- **CT abdomen/pelvis**: RLQ multiloculated fluid collection with possible tubo-ovarian abscess, enlarged uterus with fluid in endometrial canal consistent with recent postpartum state. Appendix displaced by right abdominal collection but otherwise unremarkable.



Right Lower Quadrant Multiloculated Abscess

Final Diagnosis
Acute Appendicitis with perforation and abscess

Clinical Course

- She was initially treated with opiates for pain, and antiemetics for nausea.
- Upon seeing CT scan results, General Surgery was consulted and recommended starting IV Zosyn as well as IR consult for drain placement on admission.
- Given her medical stability and lack of persistent fever with IV antibiotics, General Surgery decided to continue with non-operative treatment - Drain & IV antibiotics – with the plan to ultimately bring the patient back for appendectomy once her infection improved.
- On hospital day 3 a Repeat CT Abdomen/Pelvis was performed due to poor drain output. It showed the RLQ abscess size unchanged, so the drain was upsized.
- On Hospital Day 5 the patient was discharged home after multiple days afebrile and normalization of WBC, with 7 days of PO antibiotics & drain in place (removed 10 days later).
- 13 days post-discharge the patient underwent laparoscopic appendectomy, and the pathology was found to be consistent with appendiceal perforation.

Conclusion

- Appendicitis remains a rare cause of postpartum fever & can be difficult to diagnose due to atypical presentations⁴ and physiologic changes in the postpartum period.
 - o Our patient was initially diagnosed with endometritis, although she did present with RLQ pain radiating down the right leg
 - o This case emphasizes the importance of maintaining a broad differential in the postpartum period and to remember common problems can occur at any time

References

1. Jacob, Brian P, Rebarber, Andrei (2019). Overview of the postpartum period: Disorders and complications. In Eckler, Kristen, Levine, Deborah, Lockwood, Charles, and Weiser, Martin (Eds.), UpToDate.
2. Mourad J, Elliott JP, Erickson L, Lisboa L. (2000). Appendicitis in pregnancy: new information that contradicts long-held clinical beliefs. Am J Obstet Gynecol. 2000; 182(5):1027.
3. Appendicitis in Postpartum Period: A Diagnostic Challenge. Divya Wadhawan, Seema Singhal, Nivedita Sarda, Renu Arora, J Clin Diagn Res. 2015 Oct; 9(10): QD10–QD11. Published online 2015 Oct 1. doi: 10.7860/JCDR/2015/11970.6642
4. Roger K Gerstle, MD. (2008). Postpartum Appendicitis Presenting as RUQ Pain. Am Fam Physician. 2008 Feb 1;77(3):282.