

# Is anchoring weighing you down? A case of misdiagnosis of cholecystitis as menstrual cramps in a postpartum female

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## Introduction

- Anchoring bias: cognitive heuristic where clinicians use previous knowledge as a reference point for diagnosis and fail to modify it even after receiving new information.<sup>1,2</sup>
- Post-partum diffuse abdominal pain may lead physicians to focus on etiologies involving genitourinary and/or reproductive organs if anchoring is present.<sup>3,4</sup>

## Methods

Noncontrolled, observational case report focuses on one patient diagnosed with cholecystitis at a large academic medical center.

## Results

### Emergency Department (ED) Presentation

36-year-old female with anxiety, obesity, and 4-months postpartum after an uncomplicated vaginal delivery presented with a three-day history of diffuse, constant abdominal pain that radiated to her back and diarrhea.

- **Procedures:** levonorgestrel IUD 2 weeks prior.
- **ROS:** denied fever, vomiting, dysuria.
- **Medications:** levonorgestrel IUD.
- **Social:** denied alcohol, tobacco, illicit drugs use.
- **Vital Signs:** 36C, HR 108, RR 18, BP 127/74, SpO<sub>2</sub>: 99% on room air.
- **Physical Exam:** unremarkable.
- **Labs:** AST 53, ALT 35. UA - hematuria/proteinuria.
- **Transvaginal ultrasound:** appropriately-place IUD.

## Results Continued

### ED Presentation

- **Diagnosis on discharge:** abdominal cramps secondary to menses.

### Gynecology Office Presentation

Two days after presenting to the ED, the patient presented to her gynecologist's office for evaluation of her IUD, which was determined to be an unlikely cause of her abdominal pain.

### Primary Care Physician Office Presentation

Later that day she presented to her PCP, with fevers and progressively worsening epigastric and RUQ abdominal pain.

- **Physical Exam:** positive Murphy's sign without guarding or rebound tenderness.
- **CT scan:** findings consistent of acute cholecystitis.



Figure 1. CT abdomen showing distended gallbladder with gallbladder wall thickening measuring up to 5 mm and pericholecystic fat stranding. Cholelithiasis.



Figure 2. RUQ ultrasound showing distended gallbladder with a large, nonmobile stone in the neck and filled with sludge.

## Results Continued

### Return to ED

- RUQ ultrasound: large, non-mobile stone in the neck of the gallbladder, sludge, and a borderline dilated common bile duct to 5 mm, confirming the presence of acute cholecystitis.
- The patient was admitted and successfully underwent a laparoscopic cholecystectomy.

## Conclusions

- Anchoring bias, may result in healthcare overutilization, delayed diagnosis and negative patient outcomes.
- Keeping a broad differential diagnosis for abdominal pain in reproductive-age females, can mitigate anchoring bias and the potential for delayed diagnoses with poor outcomes in patient care.

## References

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