Breast Mastitis During Third Trimester Pregnancy: Case Report

Daniel Pun, MHS[1], Elizabeth Pinchman, MD[2], Veronica Maria Pimentel, MD[2]

[1]Frank H. Netter School of Medicine at Quinnipiac University, North Haven, CT, 06492
[2]Saint Francis Hospital, Hartford, CT, 06105

INTRODUCTION

Clinical findings of mastitis include tender, erythematous, warm, and swollen breast tissue associated with fever, chills, pain, or systemic illness.

According to the American College of Obstetricians and Gynecologists (ACOG), mastitis is one of the most common complications of breastfeeding.[1] One review noted that approximately 75% to 95% of lactational mastitis cases present within the first 3 months postpartum.[2] While significantly rarer, mastitis can occur antepartum and requires prompt recognition to adequately treat and minimize sequelae that pose a threat to both mother and fetus.

CASE

A 36-year-old G2P1001 at 34 weeks' gestation with a history of prior cesarean section and anxiety who presented to OB triage for a 16-hour history of left breast pain, subjective fever, chills, headache, dyspnea, and lower abdominal pain. She was afebrile on presentation.

On physical exam, the left breast had warmth, non-blanching erythema, and tenderness to palpation. The left breast showed no evidence of masses, fluctuance, or lymphadenopathy along the axilla.

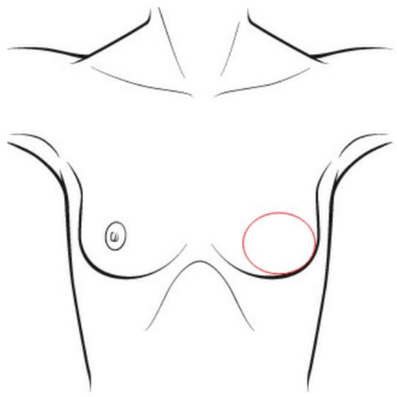


Figure 1. Warmth, erythema, and tenderness to area indicated on image.

She was also found to be hypotensive with Mean Arterial Pressure (MAP) of 52 mmHg and tachycardia to 120s bpm, prompting further workup and admission to the Medical Intensive Care Unit (MICU) for sepsis.

CLINICAL COURSE

Given the presence of leukocytosis, hypotension, and tachycardia in the setting of suspected mammary source of infection, sepsis protocol was initiated. Patient received a sepsis bolus and intravenous vancomycin, cefepime, and metronidazole were initiated. Additional workup including breast ultrasound and transthoracic echocardiogram. Vasopressors were considered due to the patient's labile pressures, but ultimately not utilized.

Test	Result	Reference Range
WBC	14.5 K/mcL	4.0-10.5
Hemoglobin	11.7 g/dL	12.5-16
Procalcitonin	3.15 mcg/L	<0.05
C-reactive protein	13.8 mg/dL	<0.9
Lactate	1.1 mmol/L	0.5–2.2
Sodium	130 mmol/L	135–145
Creatinine	0.6 mg/dL	0.5–1.0
AST	27 unit/L	5-40
ALT	11 unit/L	7-52
D-dimer	3283 ng/mL	<231

Figure 2. Clinical Course Lab Work.

Ultrasound of the left breast confirmed the presence of mastitis without abscess.

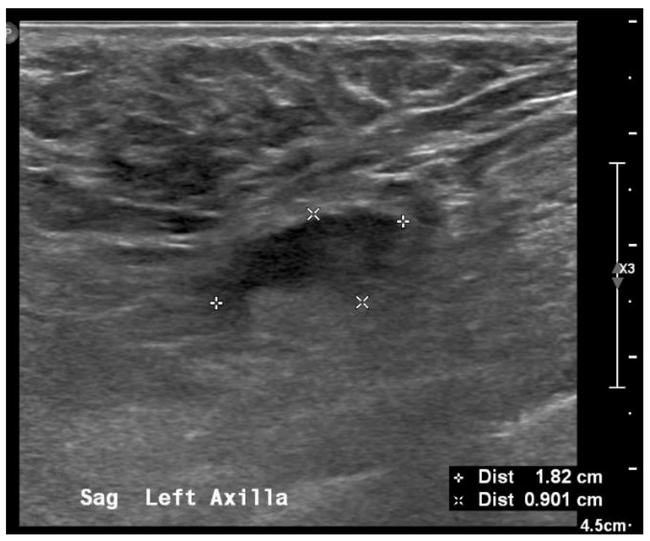


Figure 3. Breast Ultrasound Imaging.

Over the course of 2 days, the patient's blood pressures normalized, and pain subsided with continuous IV fluids and broad antibiotic therapy. Fetal heart monitoring was reactive throughout admission. Blood culture was negative and urine culture grew Streptococcus agalactiae. She felt significant improvement with resolution of initial symptoms and was discharged home on a 10-day course of dicloxacillin with office follow-up.

DISCUSSION

This case report demonstrated an uncommon presentation of mastitis, which is typically driven by postpartum lactation and milk stasis. Therefore, antepartum mastitis required attentive care with broad clinical suspicion to avoid downstream sequalae such as organ failure, septic shock, or fetal demise. Successful management of unusual manifestations of common pregnancy-related complications requires the following:

1. Prompt escalation of care to assure appropriate resources are available during the patient's clinical course.
2. Intentional use of diagnostic tools such as breast ultrasound and blood/urine cultures to narrow differential diagnosis and rule out insidious etiology.
3. Provide frequent electronic fetal monitoring and adherence to antepartum sepsis protocols such as appropriate antibiotic coverage and timely fluid resuscitation as needed.

CONCLUSIONS

Thought to primarily occur secondary to colostrum production and stasis, antepartum mastitis can progress to abscess and/or sepsis in the same fashion that lactational postpartum mastitis can.[3] While rare, this case demonstrates that antepartum mastitis necessitates timely intervention to preserve the wellbeing of the patient and the baby.

REFERENCES

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