Postpartum Ovarian Vein Thrombosis Mimicking Acute Abdomen: A case report

中國醫藥大學附設醫院 婦產部 陳怡燕 許希珍

Introduction

Ovarian vein thrombosis(OVT) is rare but could lead to awful consequence if left untreated. The risk factor of OVT included malignancies, pelvic surgical procedures, pelvic inflammatory disease, and postpartum women. Patients with OVT may presented with lower abdominal pain, flank pain, fever, chills, leukocytosis, nausea, and vomiting. Differential diagnosis may include acute appendicitis, endometritis, pyolonephritis, or tubo-ovarian abscess.

Case Report

A 25-year-old female, gravida 1, para 0, without known special history, pregnant at the gestational age of 40⁺⁶ weeks, was admitted for delivery due to labor pain for hours. She had vaginal delivery of a healthy girl smoothly and postpartum course was smooth until 3 days later.

She complained of sudden onset of severe RLQ dull pain radiating to right lower back. At the same time, she had fever up to 40.1°C with chills. She had fair appetite and denied diarrhea, nausea, vomiting, UTI, and URI symptoms. Physical examination revealed localized tenderness over right lower quadrant with normoactive bowel sound, but neither abdominal muscle guarding nor peritoneal sign presented. Laboratory exam disclosed leukocytosis with left shift (WBC 13070/µl, segment 91.8%) and elevated CRP value(5.88mg/dl). Under the general surgeon's suggestion, acute appendicitis couldn't be excluded and detailed imaging was arranged. Abdominal and pelvic CT demonstrated thrombus in IVC and right gonadal vein thrombosis, suspect thrombophlebitis; besides, the appendix was normal in appearance. Sonography showed no evidence of deep vein thrombosis in the lower extremities. We investigated the etiology of thromboembolism diathesis, including autoimmune marker, protein C and S, and homocystein, but all revealed unremarkable. Thrombolytic therapy was initiated. Empirical antibiotics with Unasyn was administrated. Cervical culture showed E. coli, but blood culture showed no bacterial growth. Fever and abdominal pain subsided gradually, and she was discharged under stable condition.



Figure 1



Figure 2



Figure 3

Figures

- 1&3. Abdominal CT demonstrated a filling defect in the vein lumen indicating thrombus in IVC.
- 2. Abdominal CT demonstrated thrombus in right gonadal vein.
- **4.** Color Doppler sonography showed indirect sign of venous thrombosis: loss of venous pulsatility and respiratory variation in bilateral common femoral vein suspicious for venous thrombosis higher up in pelvic vein.

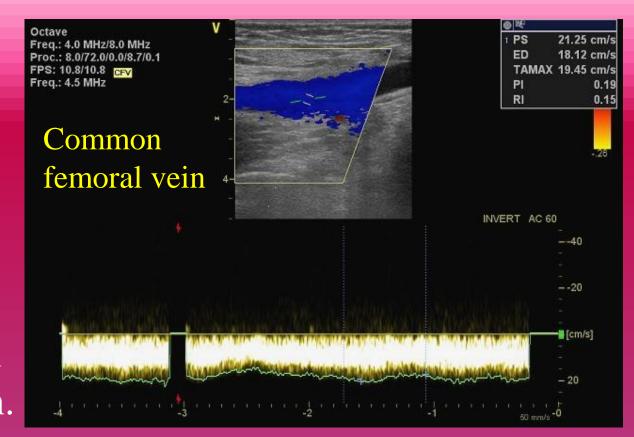


Figure 4

Conclusions

Postpartum ovarian vein thrombosis is very rare, and so far there are less than 100 cases reported. The estimated incidence of OVT was about 0.05% to 0.18% of pregnancies. The affected ovarian vein is on the right side in most cases, ranging 80~90%, and it commonly happened during postpartum day 2~15. Common presentation of OVT include lower abdomen pain or flank pain, fever and leukocytosis. The treatment of OVT include anticoagulation and antibiotics. The possible complication of OVT include sepsis, inferior vena cava thrombosis, renal vein thrombosis, and , the most notorious, pulmonary embolism, the leading cause of mortality in OVT patients. Diagnosis of postpartum OVT is difficult, and CT remains the choice of diagnosis. By presenting this case with fever and RLQ pain mimicking acute abdomen, we would like to remind all obstetricians to add OVT into your differential diagnosis list.