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INTERNATIONAL JOURNAL OF ADVANCED RESEARCH (IJAR)

Article DOI:10.21474/IJAR01/20340

DOI URL: <http://dx.doi.org/10.21474/IJAR01/20340>



RESEARCH ARTICLE

POSTPARTUM OVARIAN VEIN THROMBOSIS: A CASE SERIES OF FIVE PATIENTS

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Manuscript Info

Manuscript History

Received: 27 November 2024

Final Accepted: 30 December 2024

Published: January 2025

Abstract

Ovarian vein thrombosis (OVT) is a rare but potentially serious postpartum complication. It is often associated with abdominal pain, fever, and an increased risk of thromboembolic events. This article presents a case series of five postpartum patients diagnosed with ovarian vein thrombosis, discussing their clinical presentation, imaging findings, and management.

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Introduction:

Ovarian vein thrombosis (OVT) is an uncommon but potentially life-threatening condition that predominantly occurs in the postpartum period. It is associated with hypercoagulability, venous stasis, and vascular injury, which together constitute Virchow's triad. The incidence of OVT ranges from 0.05% to 0.18% of deliveries, with the right ovarian vein being more frequently affected than the left. If not promptly diagnosed and treated, complications such as sepsis and pulmonary embolism can occur.

Case Series

Case 1

A 39-year-old woman (G4P4) presented on postpartum day 12 with fever, abdominal pain, and foul-smelling vaginal discharge. Contrast-enhanced CT scan revealed bilateral ovarian vein thrombosis. She was started on anticoagulation therapy and broad-spectrum antibiotics, leading to clinical improvement.

Case 2

A 34-year-old woman (G3P3) presented on postpartum day 11 with acute abdominal pain. A CT scan confirmed bilateral ovarian vein thrombosis. She was treated with low-molecular-weight heparin (LMWH) and discharged with oral anticoagulation.

Case 3

A 38-year-old woman (G4P4) presented on postpartum day 5 with fever and abdominal pain. Imaging demonstrated bilateral ovarian vein thrombosis. She was managed with LMWH and antibiotics, with complete resolution of symptoms.

Case 4

A 30-year-old woman (G4P4) presented on postpartum day 5 with fever, pelvic pain, fatigue, and a history of prolonged bed rest. A CT scan revealed right ovarian vein thrombosis. She was started on anticoagulation and antibiotics, with gradual recovery.

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Case 5

A 29-year-old woman (G3P3) presented on postpartum day 7 with lumbar pain. She had a history of deep vein thrombosis (DVT) in 2017, with a negative thrombophilia workup. A CT scan confirmed left ovarian vein thrombosis. She was managed with anticoagulation therapy, with a favorable outcome.

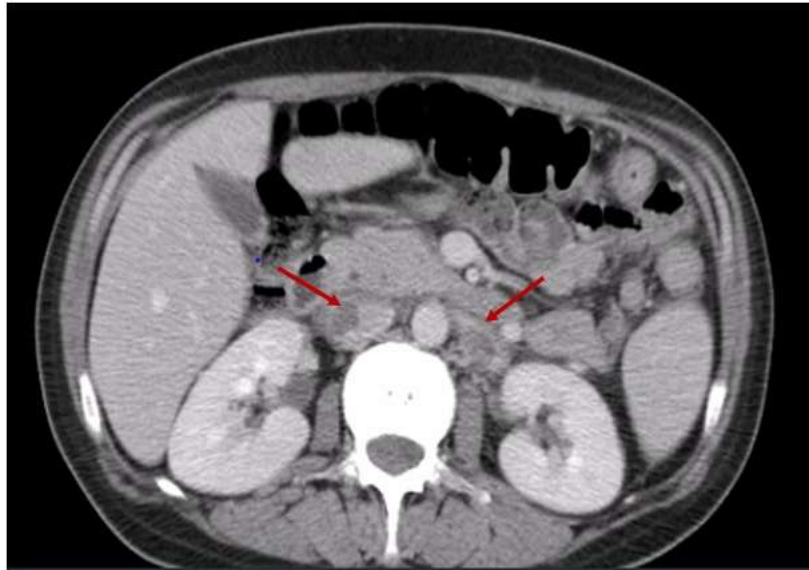


Figure 1: Abdominal CT scan (axial view, contrast-enhanced) showing bilateral ovarian thrombosis with an endoluminal thrombus appearing as a hypodense filling defect (red arrows). Radiology Department, Mother-Child Unit, CHU Hassan II, Fes.

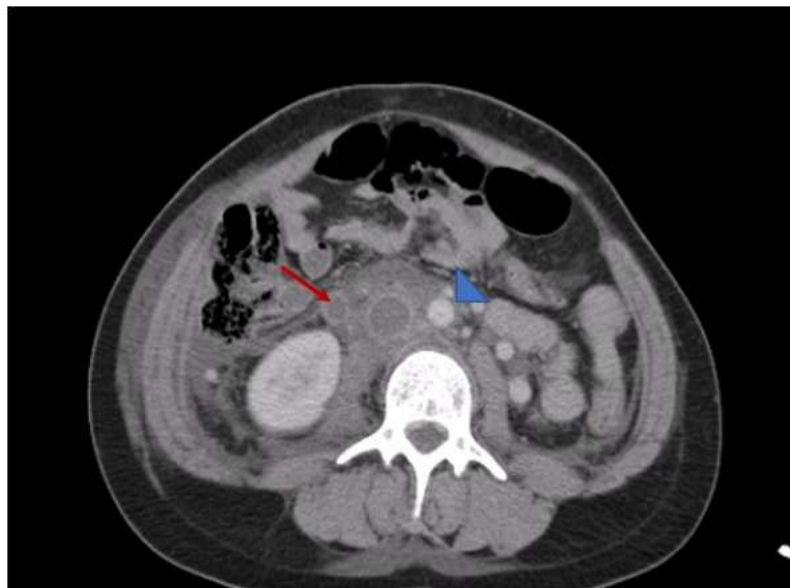


Figure 2: Abdominal CT scan (axial view, contrast-enhanced) showing a right ovarian vein thrombosis with an endoluminal thrombus appearing as a hypodense filling defect (red arrow) and the left ovarian vein (blue arrow). Radiology Department, Mother-Child Unit, CHU Hassan II, Fes.

Discussion:

Postpartum OVT commonly occurs within the first two weeks after delivery, with the right ovarian vein being more frequently affected due to anatomical factors. Risk factors include multiparity, cesarean delivery, infection, prolonged bed rest, and personal or family history of thrombosis. The clinical presentation can mimic other acute

abdominal conditions, making imaging essential for diagnosis. CT with contrast is the preferred imaging modality, revealing a non-opacified, enlarged ovarian vein.

Management involves anticoagulation therapy, typically with LMWH followed by oral anticoagulation. Antibiotics are indicated if infection is suspected. In rare cases, complications such as pulmonary embolism or abscess formation may require surgical intervention.

Conclusion:

Ovarian vein thrombosis is a rare but significant postpartum complication that should be considered in women presenting with fever and abdominal pain. Early diagnosis and anticoagulation therapy are crucial in preventing severe complications.

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