Peripartum cardiomyopathy: A diagnostic dilemma

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Background

Peripartum cardiomyopathy (PPCM) is a rare cause of pregnancy-related heart failure. Diagnosis can be challenging as early signs and symptoms can mimic physiological changes of pregnancy.

Aims

To present a case of acute decompensated heart failure secondary to peripartum cardiomyopathy.

Case

A 34 year-old female G2P2 presented 6 days following an elective repeat caesarean section with shortness of breath. This was on a background of preeclampsia and type 2 diabetes. She was on post-operative enoxaparin and was COVID-19 unvaccinated. Her BMI was 63. On presentation, she was hypoxic to 80%, tachycardic, hypertensive and unable to lie flat. Venous blood gas showed type 2 respiratory failure. Chest x-ray showed diffuse pulmonary oedema (Image 1), and a CTPA excluded a pulmonary embolus (Image 2). Respiratory panel was positive for COVID-19.

Results

The patient was admitted to ICU and started on BIPAP, a magnesium infusion and furosemide infusion. She received dexamethasone, remdesivir and baricitinib for COVID-19. Piperacillin-tazobactam and azithromycin were commenced to cover superimposed bacterial infection. An echocardiogram showed severe left ventricle dilation and an ejection fraction of 35%. With cardiology input, the patient started aspirin, dapagliflozin, bisoprolol and ramipril. She clinically improved and was weaned off oxygen over 3 days. Closer questioning revealed that she had been experiencing orthopnoea since 36 weeks' gestation.

Discussion

We hypothesised that PPCM started in late pregnancy, and pre-eclampsia and COVID-19 precipitated acute decompensation. Given the potential difficulty with diagnosis of PPCM, recognition of predisposing factors such as diabetes, hypertensive disorders, smoking, obesity, and viral infections, is essential to rapid diagnosis and treatment.



Image 1: CXR showing diffuse pulmonary oedema



Image 2: CTPA; diffuse pulmonary oedema.
Differentials: ARDS, acute non cardiogenic pulmonary oedema or atypical infection







