

CASE

We report a 48-year-old male smoker with no known prior medical illness who presented with sudden left-sided chest pain radiating to the epigastrium, associated with vomiting. On arrival, he was markedly hypertensive (207/131 mmHg). He reported a 1-year history of paroxysmal palpitations, headaches, migraines, and intermittent diaphoresis. Computed tomography angiography excluded aortic dissection but demonstrated a left retroperitoneal hemorrhage with non-visualization of the adrenal gland, suggestive of adrenal or tumor-related hemorrhage.

He was initially managed empirically as a pheochromocytoma while undergoing biochemical evaluation; however, urinary metanephrines were only mildly elevated. Repeat imaging demonstrated interval enlargement of a non-enhancing suprarenal mass, raising concern for tumor-related hemorrhage. Subsequent ultrasonography, however, favored a liquefied hematoma, and percutaneous drainage yielded 750 mL of sanguineous fluid, resulting in marked clinical improvement.

Notably, an elevated hematocrit prompted further evaluation for erythrocytosis. Subsequent testing confirmed JAK2 mutation-positive polycythemia rubra vera, providing a unifying explanation for both the erythrocytosis and spontaneous adrenal hemorrhage. The patient was commenced on hydroxyurea and referred for hematology follow-up.

CONCLUSION

Adrenal hemorrhage may closely mimic pheochromocytoma in hypertensive emergencies. A systematic, multidisciplinary approach integrating clinical, biochemical, and imaging findings is essential to avoid misdiagnosis and guide appropriate management, particularly in patients with underlying hematological disorders.

EP_A006

TWO HEARTBEATS, ONE TUMOR: NON-FUNCTIONING ADRENOCORTICAL TUMOR IN PREGNANCY

Nur Nisrina Yahya¹ and Noor Rafhati Adyani
Abdullah¹

¹Hospital Sultanah Bahiyah

INTRODUCTION

Adrenocortical carcinoma (ACC) is a rare and aggressive malignancy, with an incidence of 1–2 cases per million annually. Its occurrence during pregnancy is exceptionally

uncommon, presenting significant diagnostic and management challenges due to overlapping physiological changes and concerns for both maternal and fetal outcomes. While most cases are hormonally functional, non-functioning ACC during pregnancy is particularly rare and may result in delayed diagnosis.

CASE

A 35-year-old Malay female was referred following ultrasonography for persistent back and left flank pain, which revealed a left adrenal incidentaloma and a concurrent 10-week intrauterine pregnancy. There were no clinical signs of hormone excess. Physical examination revealed a normotensive patient with a large, palpable left abdominal mass, without Cushingoid or virilizing features.

Magnetic resonance imaging (MRI) demonstrated a 12.1 × 10.3 × 12.8 cm heterogeneous left adrenal mass with cystic and necrotic components, displacing adjacent structures. Hormonal evaluation was within normal limits: 24-hour urinary cortisol 320.2 nmol/24 hours (reference range [RR] 11.8–350), midnight salivary cortisol <3 and 4.2 nmol/L (RR <11.3), plasma metanephrine <0.2 nmol/L (RR <0.5), normetanephrine 0.6 nmol/L (RR <0.9), and 17-hydroxyprogesterone 223 ng/dL (RR <285), consistent with a non-functioning tumor.

Following multidisciplinary consultation, the patient underwent open left adrenalectomy at 16 weeks' gestation. Histopathological analysis confirmed ACC (Weiss score 8/9) without extra-adrenal extension. Surveillance MRI at 32 weeks demonstrated no recurrence or residual mass. At 40 weeks' gestation, she delivered a healthy infant, and both mother and child remain well on follow-up.

CONCLUSION

Non-functioning ACC during pregnancy is rare and poses significant diagnostic challenges. Early imaging, comprehensive hormonal assessment, and timely surgical intervention during the second trimester are essential. Multidisciplinary management is crucial to optimizing maternal and fetal outcomes.