SAT-194

Pheochromocytoma During Pregnancy: A Ticking Time Bomb

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Background

A pheochromocytoma diagnosed during pregnancy is an extremely rare condition with an incidence of 0.002% of all pregnancies. If untreated, consequences are devastating including a maternal and fetal mortality as high as 50%. There is no consensus in the literature regarding the management of this condition during pregnancy.

Clinical Case

A 25-year-old woman G4P1021 with recently diagnosed hypertension presented at 15 weeks of gestation with shortness of breath, palpitations and chest pain. Vitals revealed hypertension and tachycardia. A CT angiogram of the chest was obtained which ruled out pulmonary embolism but detected a 5.5-cm left adrenal mass. Biochemical work up revealed elevated plasma and urine normetanephrines. A dexamethasone suppression test was normal. A plasma aldosterone to renin ratio was normal. An MRI of the abdomen confirmed the presence of a large heterogeneous 6-cm left adrenal mass (Figure 1).

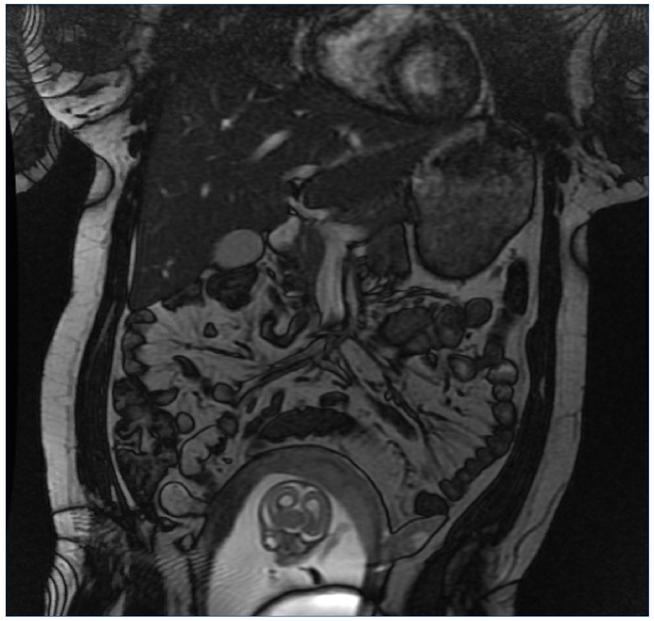

***Figure 1*. MRI of the abdomen**

A multi-disciplinary team discussion including an obstetrician, endocrinologist, endocrine surgeon and anesthesiologist led to the decision to perform an adrenalectomy during the second trimester. Doxazosin was started at a dose of 2 mg daily, which was later titrated up to 2 mg BID with excellent blood pressure control. Metoprolol was added 4 days prior to surgery for heart rate control. A laparoscopic left adrenalectomy was performed at 19 weeks of gestation. Intra-operatively, the patient had a brief period of hypotension which resolved with IV fluids and a short course of vasopressors. Patient did not have any post-operative complications and is currently not taking any anti-hypertensive medications. Her blood pressure and heart are normal. Her latest obstetric ultrasound revealed a live fetus without anatomical abnormalities and is within the normal weight and size percentiles.

Conclusions

A pheochromocytoma is a rare event during pregnancy and is associated with high maternal and fetal mortality rates. Timely diagnosis and proper treatment are of utmost importance to reduce mortality. The optimal time for surgical tumor removal has not been established but the second trimester appears to be safest period given the risk for spontaneous abortion during the first trimester and that the enlarged uterus diminishes tumor accessibility during the third trimester. Pre-operative medical management is crucial similar to non-pregnant patients. The treatment of these patients should include a dedicated team including an obstetrician, anesthesiologist, surgeon and endocrinologist.

References

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2. *Lenders JW. Pheochromocytoma and pregnancy: a deceptive connection. Eur J Endocrinol. 2012 Feb;166(2):143-50. doi: 10.1530/EJE-11-0528. Epub 2011 Sep 2.*