Hypertension with a Cure- A Rare Case of Cystic Pheochromocytoma

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Abstract

Introduction:

The prevalence of hypertension in India is estimated to be at least 25%, of which secondary hypertension accounts for 1.1 to 5.7% cases. Pheochromocytoma is one of the endocrine causes of secondary hypertension which is seen in less than 1% of patients. Here we report a 53 year old male with a left adrenal mass, diagnosed as pheochromocytoma and underwent a left open adrenalectomy.

Aim & Objectives:

Our aim is to highlight the approach to diagnosis of this rare tumor and how its early management can prevent morbidity and mortality.

Methods:

A 53 year old male who was diagnosed with systemic hypertension since 1 year presented with chief complaints of episodic spells of chest pain, palpitation, sweating and giddiness for the last 3months, with 1 witnessed episode at the time of admission. A baseline ECG showed left ventricular hypertrophy and a bedside echo revealed concentric LVH with systolic anterior motion of mitral valve seen. In view of high suspicion of pheochromocytoma, a plasma free metanephrine was done which was borderline normal. A 24-hr urinary fractionated metanephrine levels was elevated. CECT abdomen revealed a well defined heterodense lesion of size 14.2 x 11.3 cm with predominantly hypodense central necrotic material with peripheral calcification. The Hounsfield units of the solid components was 80U and showed persistent enhancement in delayed phase of imaging. MRI abdomen was suggestive of a cystic pheochromocytoma. A left

open adrenalectomy was performed and biopsy showed sheets of cells with atypical nuclei, prominent nucleoli with strong positivity for chromogranin, confirming our diagnosis.

Results:

There were no complaints of hypertensive spells reported post surgery and the patient's recorded blood pressure was normal till discharge. A 24 hr. urine fractionated metanephrine level repeated 2 weeks later was within normal limits.

Conclusion:

Pheochromocytoma is a catecholamine secreting neuroendocrine tumor arising from the chromaffin cells of the adrenal medulla. The episodic symptoms and labile blood pressure can be attributed to the release of catecholamines, chronic volume depletion and impaired sympathetic reflexes. Surgical resection of pheochromocytoma is the cornerstone of therapy, following which hypertension can be cured.

Keywords: *Pheochromocytoma, hypertension, catecholamines, adrenalectomy, chromogranin*

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