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Interesting Case of Adrenal Mass Lesion.

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ABSTRACT

Adenomas, the most common neoplasms arising from the adrenal gland and are most often associated with the cortex. These lesions are found in approximately 6% of patients at autopsy. More than 85% of adrenal neoplasms incidentally discovered on imaging are ultimately clinically proven to be adenomas. Hence they are called as “incidentalomas.”The essential evaluation of the small adrenal mass requires differentiating the nonfunctional benign adenoma from functional or malignant lesions.

Keywords: adenomas, neoplasms, adrenal mass lesion.

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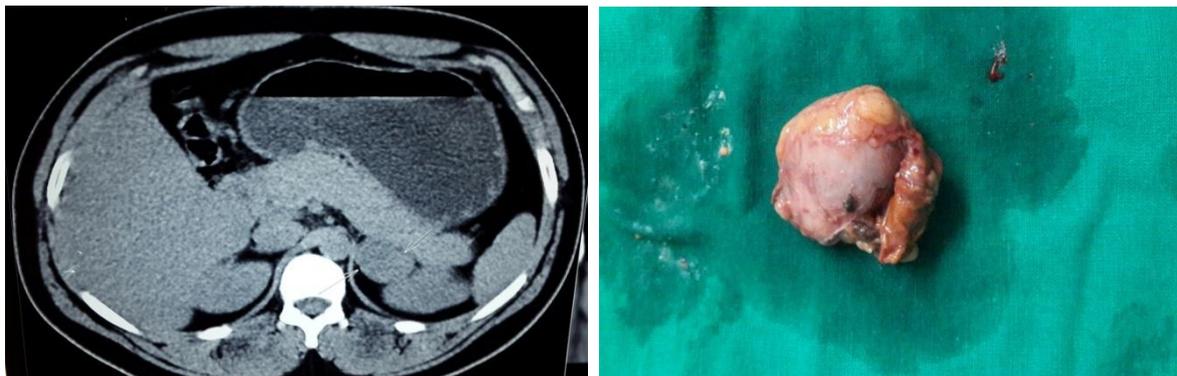
INTRODUCTION

Disorders of the adrenal glands result in classic endocrine syndromes such as Cushing's syndrome, hyperaldosteronism, and catechol excess from pheochromocytoma. The diagnosis of these disorders requires careful endocrine evaluation and imaging with computed tomography (CT) or magnetic resonance imaging (MRI) [1-6].

CASE REPORT

A 28 year old male, presented with complaints of Uncontrolled Hypertension, frequent Headaches, palpitation, Giddiness Increased sweating, with occasional Anxiety for one year duration. He was diagnosed as a hypertensive year back, and has been on multiple drugs since His blood pressure is 190/110mmhg, and is on multiple anti-hypertensive drugs. On examination he was well built and nourished no anemia/ jaundice/ pedal edema, no features suggestive of Cushings Syndrome

CT Abdomen showed well defined lesion 33×28 MM involving the lateral limb of left adrenal gland. Colour doppler study of both renal arteries showed no haemo dynamically significant significant renal artery stenosis. 24 hrs urine V.M A, 24hrs urine Metanephrine, renal function test, Serum Electrolytes was normal. Patient underwent laparoscopic opic Adrenalectomy. Post operative period was Uneventful. Histopathology report came as Adrenocortical adenoma. Now, patient is asymptomatic and his blood pressure is under control, with only mild dose of anti-hypertensive drugs.



Well Defined Lesion Measuring 33mm ×28mm Involving the Lateral Limb of Left Adrenal Gland, Probably Adenoma

DISCUSSION

Adenomas, the most common neoplasms arising from the adrenal gland and are most often associated with the cortex. Adenomas possess an Yellowish color on gross pathological examination due to presence of abundant lipid.[1]

- Non-functional adrenal adenomas
- Functional adrenal adenomas

An overwhelming majority (93%) of adenomas displays no evidence of metabolic activity, Non-functional type.

Hyperaldosteronism/Conn's syndrome

Hypertension, proximal muscle weakness, headache, polyuria, tachycardia with/without palpitation, hypokalemia, hypocalcemia

Hypercortisolism/Cushing's syndrome

Central obesity, moon facies, plethora, striae, thin skin, easy bruising, hirsutism, telangiectasias, hyperhidrosis

Virilization**Goal in evaluation:**

- Rule out the possibility of malignancy
- Document metabolic inactivity of the lesion in question

Non contrast CT scan is arguably the most valuable imaging study for the diagnosis of an adrenal adenoma. It offers accurate measurements of a lesion's density, uniformity, and size. The vast majority are smooth-bordered, homogeneous tumors that are less than 4 cm in diameter

CT "washout" Study, considered the gold standard for adrenal imaging. Here loss of attenuation of the lesion is noted on delayed contrast-enhanced CT imaging. Lesions that "washout" more than 40% to 60% of gained enhancement can be identified as adenomas.

Assessment of Function of Adrenal Masses:**Testing for Cortisol Hypersecretion:**

1. An overnight low-dose dexamethasone suppression test (OST)
2. A late-night salivary cortisol test, and
3. A 24-hour urinary-free cortisol evaluation

Testing for Catecholamine Hypersecretion :

1. Free-fractionated plasma metanephrines and
2. The 24-hour urinary-fractionated metanephrine

Surgery:

1. Laparoscopic Adrenalectomy
2. Open Adrenalectomy

Laprosopic:

Nonmalignant, primary unilateral or bilateral adrenal tumour <8-10 cm in size /Solitary unilateral adrenal metastasis /Small Adrenocortical Carcinoma

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