

### **Minimal - Invasive Surgery for a Rare Tumor - A Procedure par Excellence**

A 45 year old woman, known hypertensive and diabetic, had visited urology OPD in Dr. PSIMS & RF hospital, with complaints of puffiness of face and intermittent pain in abdomen since 1 year. On examination she had a “moon face”( facial puffiness), a hump like swelling on the nape of neck, central obesity with abdominal skin striae, conjunctival chemosis & pedal edema. Patient had undergone CT scan which showed a 3x2.8x2.2cm left adrenal tumor. Her hormonal assay study revealed blood cortisol levels about 22.89 mcg/dl which was abnormally elevated. ( Normal – less than 1.8 mcg/dl ). Plasma ACTH levels were 1.89 pg/dl ( Normal – 10-52 pg/dl ). Her hormonal workup for pheochromocytoma namely [ 24 hr urine metanephrins – 50.29 mcg/dl ( < 350 mcg/dl ), Renin activity – 3.0 ng/ml ( 0.29 – 3.7 ng/ml ), Plasma free metanephrins – 25.83 pg/ml ( < 65 pg/ml ), 24 hr urine Vinyl Mandelic Acid – 2.65 mg/day ( < 13.65 mg/day ), Aldosterone – 305.86 pg/ml ( 25 – 315 pg/ml ). ] was done and it was within normal range.

MRI revealed a solitary left adrenal lipid poor lesion of 2.5x2.3x2.2 cm. A diagnosis of a functional, cortisol secreting solitary left adrenal tumor with cushing syndrome was made. The serum cortisol levels on the day of surgery was 52.93 mcg/dl. Laparoscopy - assisted left adrenalectomy was done and the tumor was removed in toto. Postoperative period was uneventful, with the serum cortisol levels coming down to 6.75 mcg/dl on day 10. Subsequently she was placed on steroid replacement therapy.

The gross specimen showed a solitary tumour of size 3x2.5x2 cm, weighing approximately 12gm with intact capsule and histopathological examination confirmed it as an adrenal cortical adenoma.

The hormones secreted by the adrenals are necessary for maintaining the homeostasis of a normal internal milieu. Functional adrenal adenomas are rare entities and they disturb the fine hormonal balance with effect on various metabolism thus are very difficult to manage. Surgery is the treatment of choice in this case with cushings syndrome caused due to functioning left adrenal adenoma.

Such a very rare case has been successfully operated by the urology team at Dr. Pinnamaneni Siddharth Institute of Medical sciences & Research Foundation, Chinnoutpalli.

PRE-OPERATIVE CLINICAL PHOTOGRAPHS



MOON FACE



BUFFALO HUMP ON THE NECK



ABDOMINAL SKIN STRIAE



CUNJUNCTIVAL CHEMOSIS

## EXCISED SURGICAL SPECIMEN



INTACT COMPLETELY EXCISED LEFT  
ADRENAL GLAND WITH TUMOR



CUT SECTION OF THE ADRENAL  
ADFNOMA

Pre-operative facial puffiness



Post operative photo showing  
significantly reduced facial  
puffiness

