



**ORIGINAL RESEARCH PAPER**

**General Surgery**

**EXTRA-ADRENAL PARAGANGLIOMA - THE DISTRACTOR**

**KEY WORDS:**

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**INTRODUCTION**

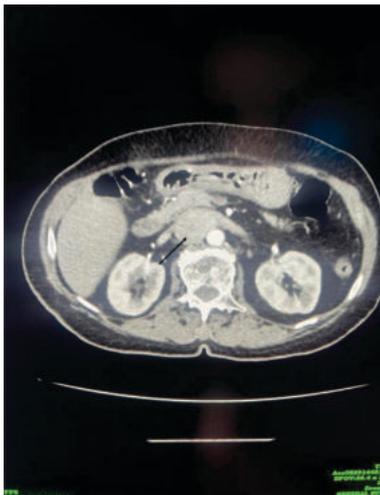
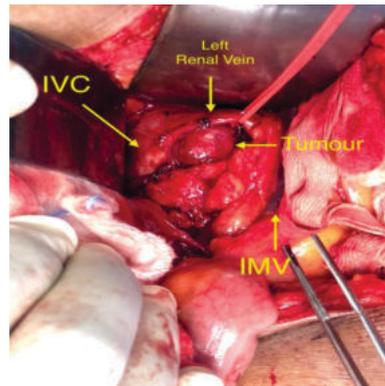
- Paraganglioma is a type of neuroendocrine tumour which forms near blood vessels and nerves outside the adrenal gland
- It involves the peripheral nervous system
- Tumour involves the Chromaffin cells
- Also called Extra-adrenal Pheochromocytoma
- They are usually benign tumours and rarely turn malignant

**Case Report**

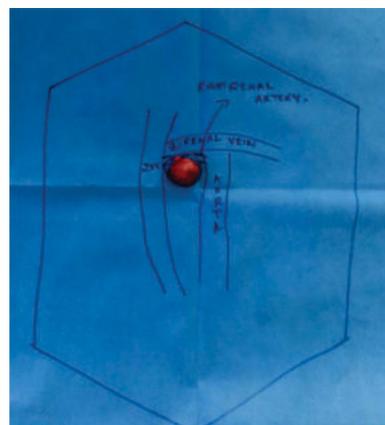
- 76 year old female known diabetic and hypertensive, came for complaints of generalised weakness and loss of appetite for past 30 day. Abdominal examination revealed no significant findings. Systemic examination was normal.
- CECT Whole Abdomen showed a well circumscribed lesion of 2.6 x 2.9cm in the retroperitoneum in the aortocaval region at level just below origin of right renal artery, The lesion showed heterogenous enhancement in arterial phase and washout in the venous phase and severely compressing the IVC and right renal vein anteriorly
- Serum Cortisol levels was 12.7 microgram/dL
- Laparotomy was done and retroperitoneal paraganglioma in retrocaval region was released from surrounding tissues and major vessels, excised and sent for Histopathology
- Patient improved symptomatically post-operatively. Histopathological examination showed well circumscribed tumour composed of cells arranged in nested pattern and interspersed by strands of fibrous tissue



- washout of contrast in venous phase



- CECT abdomen showing Arterial phase enhancement of tumour



## DISCUSSION

- Paragangliomas are of neural crest origin that arises from paraganglionic tissues distributed along the major vasculatures (abdominal aorta) or sympathetic chain, maybe functioning or non-functioning.
- 20% of tumours secrete Catecholamines. They maybe multiple.
- Rarely associated with hypertension
- It can be familial, often associated with Von Hippel-Lindau disease and RET proto-oncogene.
- It may arise from type 1 cells as chromogranin A positive-NSE positive or type 2 cells as S-100 positive with good prognosis

## CONCLUSION

- Extra-adrenal Paraganglioma is a rare cause of abdominal pain, generalised weakness, fatigue. All common causes of fatigue must be ruled out and paraganglioma should be considered a differential diagnosis, though it is rare
- Appropriate Clinical, Radiological and biochemical workup is necessary to correlate and plan the treatment for the patient
- Most of the paragangliomas will require surgery due to its associated complications

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