



A Case of Right Angiomyolipoma with Robotic Right Nephrectomy and IVC thrombectomy

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Objectives

- To raise awareness of this uncommon condition
- Discuss about surgical techniques of robotic inferior vena cava (IVC) thrombectomy

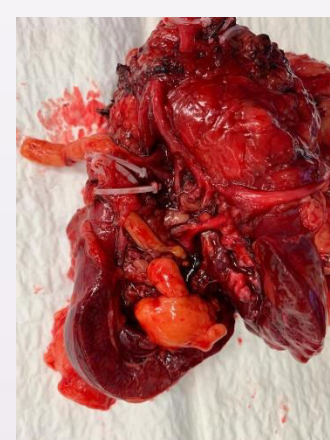
Patients & Methods

- A 58-year-old lady presented to general surgery for right lower quadrant pain. Urgent computer tomography of abdominal and pelvis showed acute ascending colon diverticulitis. There was an incidental finding of right renal angiomyolipoma with IVC extension
- Robotic right nephrectomy with IVC thrombectomy (level II) was performed
- Important operative steps & techniques:

Dissection along IVC	Right renal artery ligated	Sling vessels in the order of infrarenal IVC, left renal vein, suprarenal IVC
IVC cut open, thrombus retrieved in en bloc	IVC repaired with 4-O prolene	Vessels released in reverse order, radical nephrectomy competed

Results

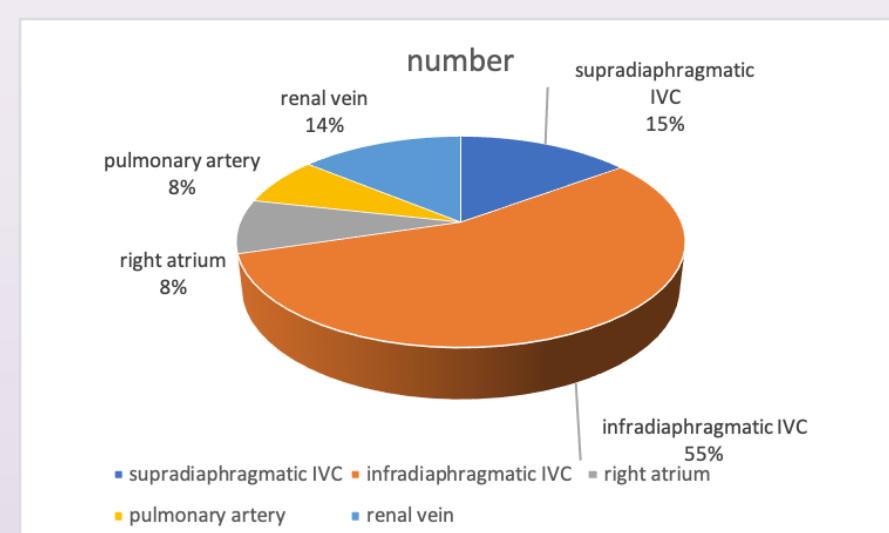
- Operation time = 4 hours 15 mins
- Blood loss = 500ml
- No postoperative complications
- Able to mobilize early
- Pathology: Angiomyolipoma
- Literature review
 - 90 cases reported
 - Female 83%
 - 25% bilateral tumours
 - 78% thrombus originate from right kidney
 - 11% had tuberous sclerosis
 - Average size 8.73cm



Specimen



Postoperative scars



Location of tumour thrombus

Reference: Maher Abdessater & Joey El Khoury & Anthony Kanbar & Pietro Kheir. Renal Angiomyolipomas with Inferior Vena cava invasion. Springer Nature Switzerland AG 2020, corrected publication 2020

Conclusion

- With the advancement of robotic surgery, the use of robotic technique for nephrectomy and IVC thrombectomy is an innovative, feasible and minimally invasive option for patients.

