MY MOST CHALLENGING CASE AS A CONSULTANT

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PATIENT HISTORY

65 year old man

obesity (105kg, BMI 32)

Chronic Kidney Disease stage 3

Acute cholecistitis 3 weeks before
right renal cell carcinoma Incindental finding during his CT scan
Discussed in urology MDT for elective right laparoscopic nephrectomy

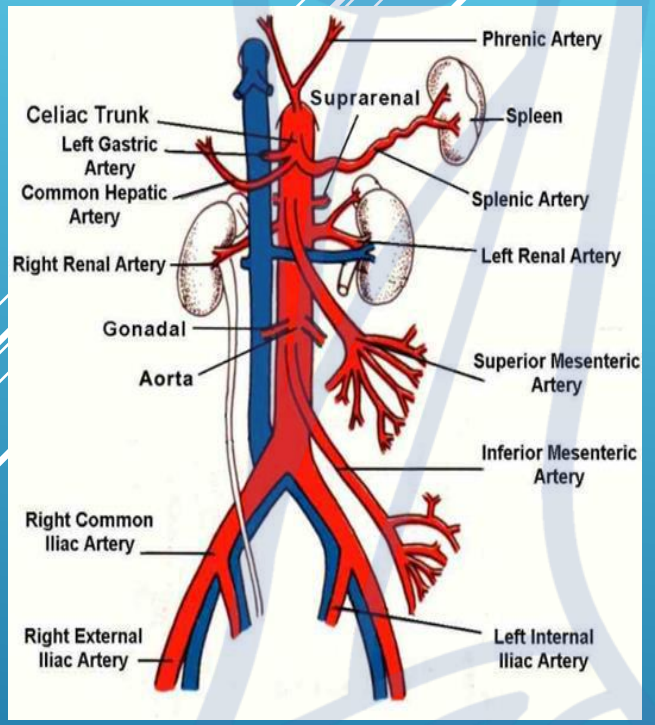
CHRONOLOGY OF EVENTS

The patient was admitted for elective right laparoscopic nephrectomy.

The procedure was challenging as the patient had inflammatory tissue due to his recent cholecistitis and dense lymphatic tissue around the kidney

the IVC was identified and the renal artery was seen going under the IVC and a stapler was used to divide the artery

Due to loss of distal pulsation it became obvious that the aorta had been incidentally stapled instead and divided fully.



WHO DO YOU CALL?

The Vascular Surgeon Oncall (Lucky Me!)

At arrival patient has no distal pulses

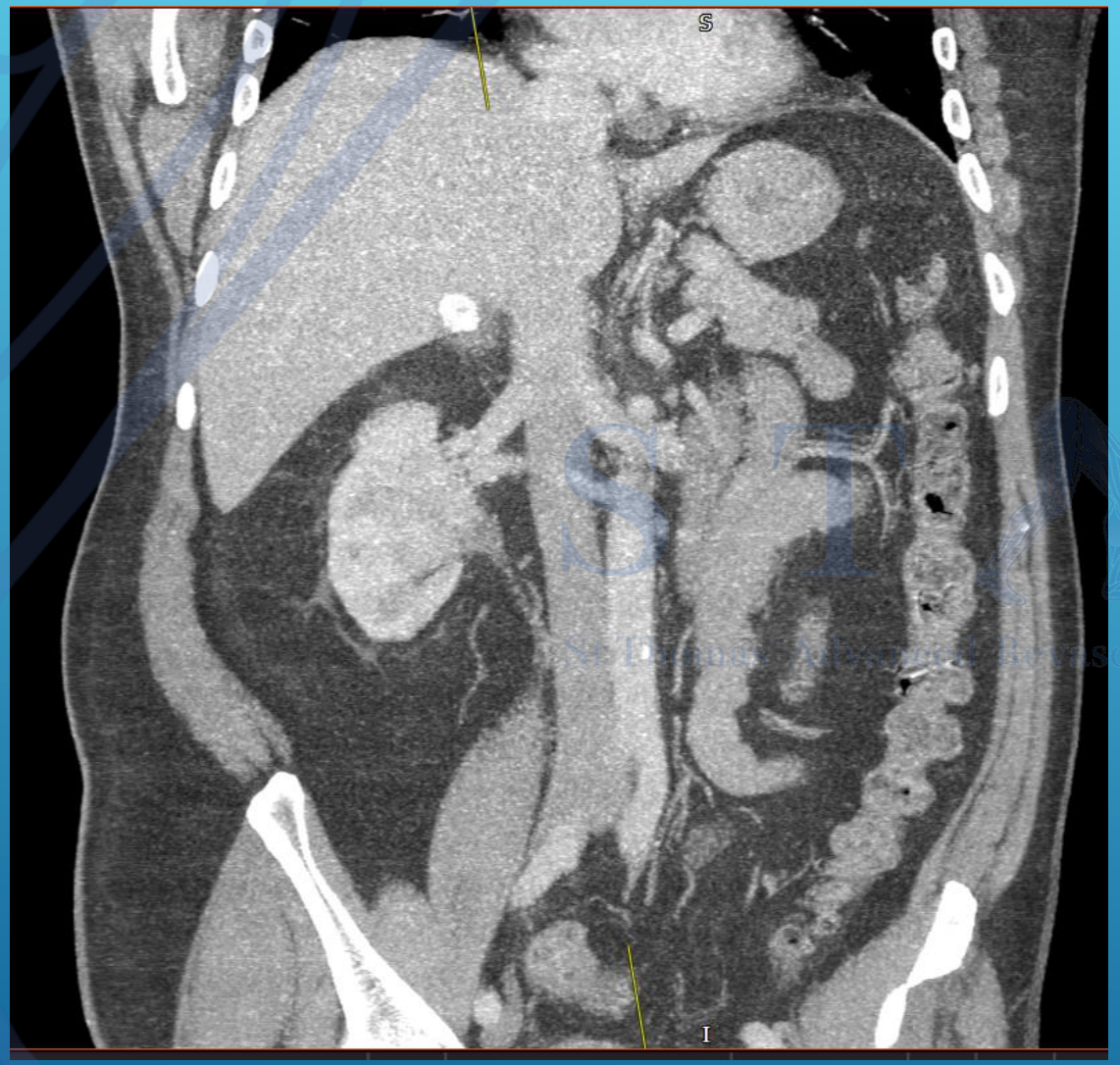
Both leg cold and pale

Angiogramm showed complete interruption of the abdominal aorta at the renal level

Decision to open repair and call for help

Unable to clamp the aorta due to the renal mass, nephrectomy performed and 20 mm tube graft anastomosis to restore the flow

Patient had no blood supply to the lower half o f the body for 4 hours from the time of the injury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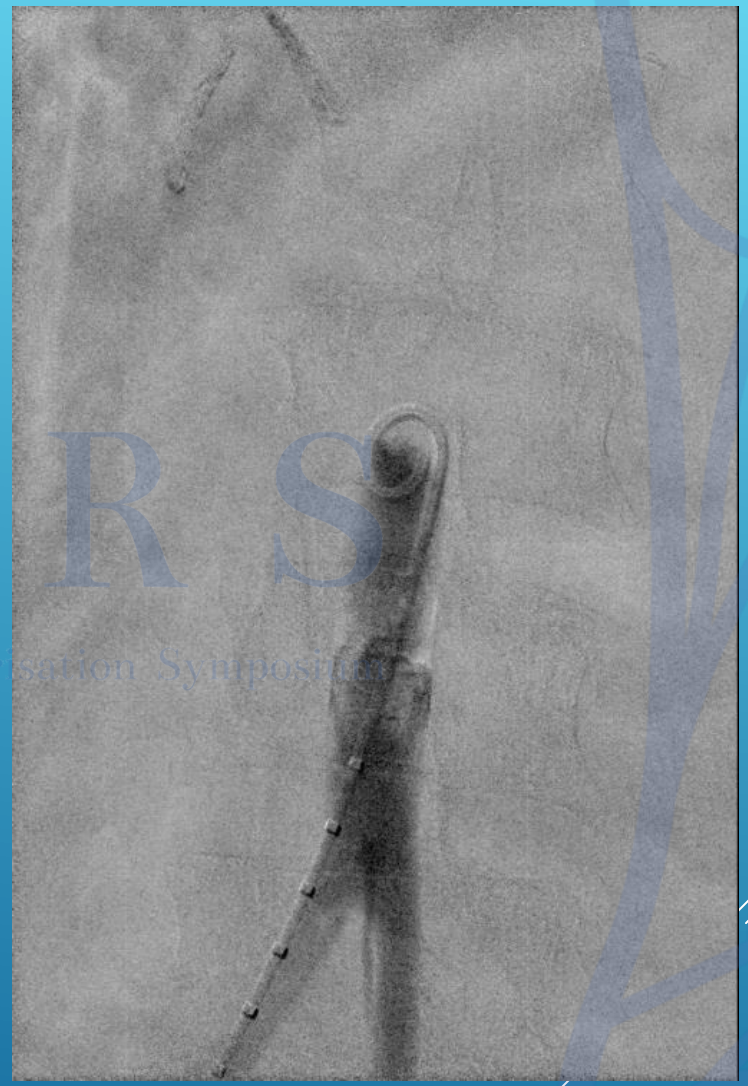

POST-OPERATIVE

Patient was admitted in Critical Care Unit

Patient was cardio-vascularly unstable, intubated and ventilated on high dose of Noradrenaline, metabolic acidosis, on hemofiltration with raising lactate/flexi-sigmoidoscopy was performed and showed ischmia of bowels

The patient died the day after of Multi organ failure due iatrogenic injury to the aorta

TASK FACTORS

Patient with High BMI and CKD

This was a retroperitoneal laparoscopic approach instead of a transperitoneal in High BMI patient with recent cholecystitis and dense lymphatic tissue

Lack of retroperitoneal landmarks/orientation /space may contribute to vena cava transection

Not convert to open when challenging dissection

A suprarenal clamp had to be applied leading to acute kidney injury post-op

DISCUSSION

Vascular Injury during laparoscopic nephrectomy is 6.6%, major injuries are 0.05%, full transection has been reported in 2 cases of IVC and 1 of the aorta in the literature (common factor was retroperitoneal approach)

Management of IAVI is challenging and high mortality as patient are physiologically already compromised

Mortality rates have not reduce over the last decades (37% in 1975-80 v 33% in 2004-9)

Injuries must be managed with primary repair

Ligation of the aorta is universally fatal (grade 2 injury) in our case a right access with IVC in front of the aorta and kidney tumour made the surgery challenging

Iatrogenic Aortic Transection in a Child

Ram Chandra Sherawat, Anil Sharma, Sunil Dixit, Mohit Sharma, Sidarth Lukaram

Aorta (Stamford) 2015 Feb; 3(1): 38–40. Published online 2015 Feb 1. doi: 10.12945/j.aorta.2015.14-043

CONCLUSION

STAY CALM

ASK HELP IMMEDIATELY

BE READY TO USE ALL SURGICAL OPEN AND ENDO OPTIONS

MAKE SURE TO WRITE WELL YOUR NOTES