Technical Tips for Obtaining Open Retroperitoneal Exposure for Treating Complex AAA Involving Pararenal and Visceral Aorta

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Disclosures

- None

Technique for Left Posterolateral Retroperitoneal Aortic Exposure

- RIGHT LATERAL DECUBITUS
- INCISION THROUGH 10TH INTERSPACE
- LATERAL ENTRANCE TO THE RETROPERITONEUM
- LIGATION OF THE LUMBAR BRANCH OF THE LEFT RENAL VEIN
- ELEVATION OF THE LEFT KIDNEY
- DIVISION OF THE CRUS OF THE DIAPHRAGM (if needed)

KEY TIPS

Positioning

- RIGHT LATERAL DECUBITUS
- ALLEN ARM REST
- BREAK OF TABLE AT ILIAC CREST
- FLEX/ELEVATE LEFT LEG TO RELAX PSOAS
Key Tips
Incision

- Incision from Lateral Border of Rectus to tip of 10-11 rib
- Elevate Kidney Medial and Cefalad
- Sweep Connections of kidney to diaphragm medially
- For More Cephalad Exposure carry incision posteriorly
- Larger incision for AAA (Iliac Exposure)

Key Tips
Incision

- Left Renal should be Perpendicular to aorta
- You need to identify the Left crus, lumbar branch of the left renal vein and the Left Renal Artery
- Ligate Lumbar Branch Of Left Renal Vein

Key Tips
Dissection

- Clamp Iliacs separately, or balloon occlude right iliac
- Incise left Crus Longitudinally
- Retract Left Kidney anteriorly and Medially (Artery Perpendicular to Aorta) thus, relaxing ureter
- Keep Dissection Dry
Key Tips
Dissection
- Locate Clamping "Landing Zone"
- Avoid Thrombus/Calcium
- Isolate SMA/Celiac (if Necessary)
- Heparin 30 units/kg
- Clamp Placed Above or between renals or Supra celiac

Key Tips
Aortic Anastomosis
- Transect Aorta below renals, look out for Right renal orifice
- Leave enough “Aortic Cuff”
- Start at 9 o’clock, go to 12
- Parachute technique
- Move Clamp Below renals and anastomosis
Type IV TAAA

Conclusions

- Evaluation of the Aortic Neck Prior to Clamping Is Important
- Clamp Once and Cleanly
- The Retroperitoneal Approach May Especially Benefit Patients with Complex Aortic Neck Pathology

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Thank You!