

Retroperitoneal Exposures of the Visceral Aorta and its Branches: It's Not Simple: Technical Tips



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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)

ANATOMIC BENEFITS OF RETROPERITONEAL AORTIC EXPOSURE

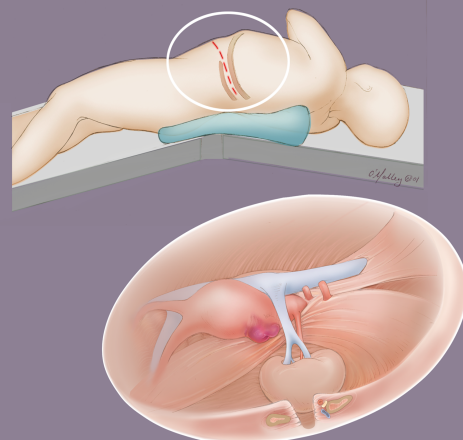
- Excellent access to the subdiaphragmatic aorta
- Permits clamping above one or both renal arteries
- With division of the left crus, allows supraceliac cross-clamping

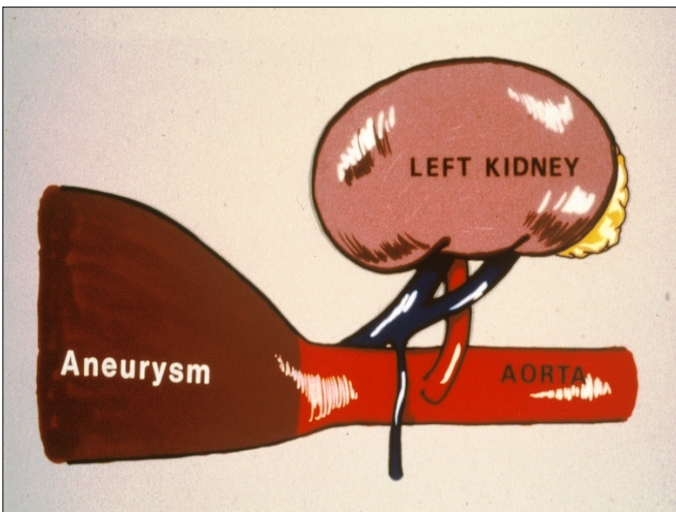
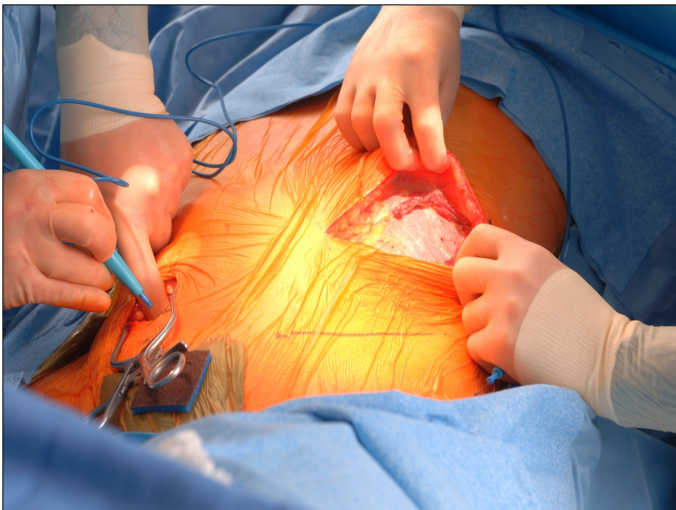
KEY TIPS Positioning

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

Key Tips Incision

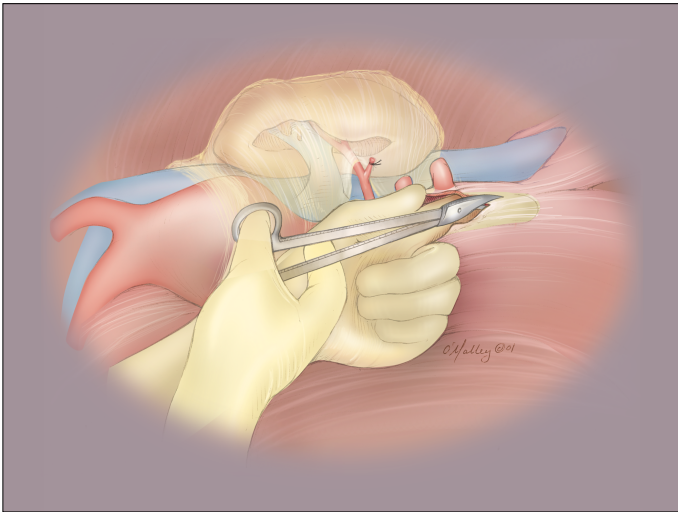
- Incision from Lateral Border of Rectus to tip of 10-11 rib
- Elevate Kidney Medial and Cefalad
- Sweep Connections of kidney to diaphragm medially
- For More Cephalad Exposure carry incision posteriorly
- Larger incision for AAA (Iliac Exposure)





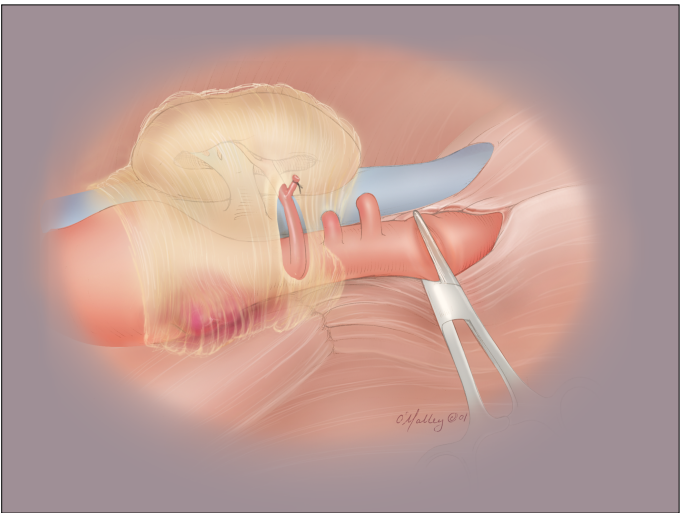
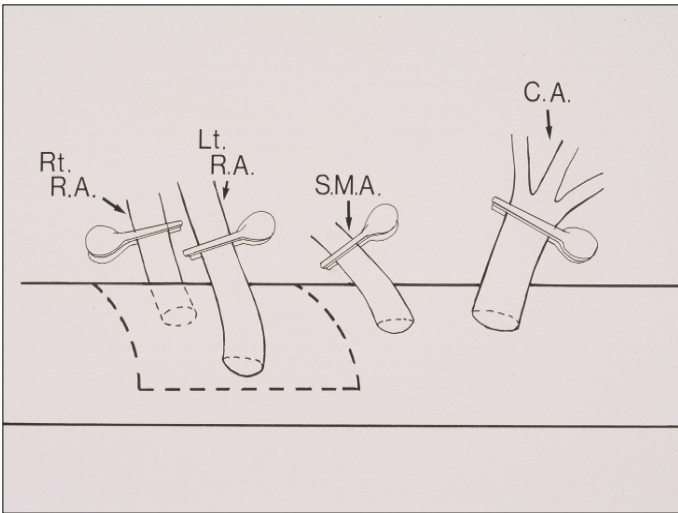
Exposure is All in the Setup

- Free up the renal attachments to the diaphragm
- Left Renal Artery should be Perpendicular to aorta(relaxes Ureter)
- Ligate Lumbar Branch Of Left Renal Vein
- Incise Left Crus

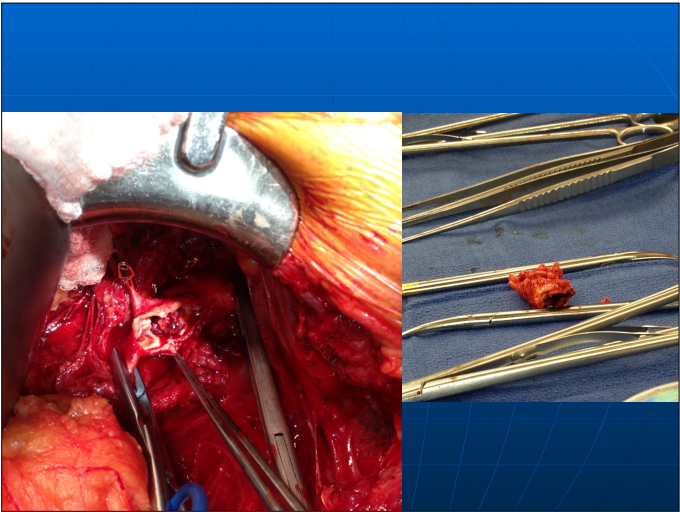


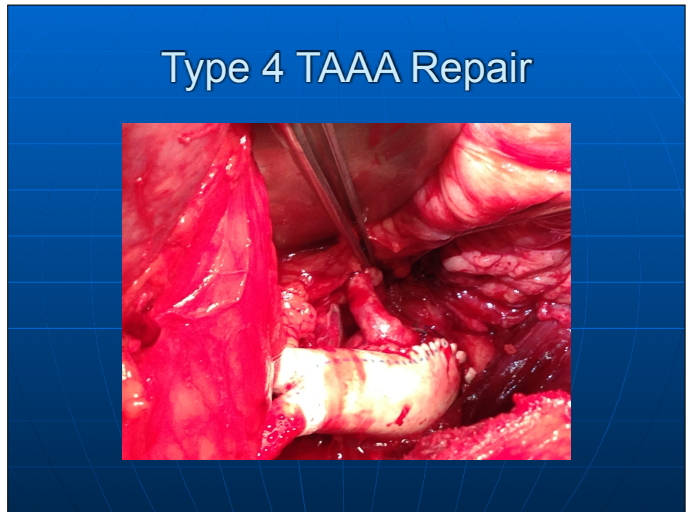
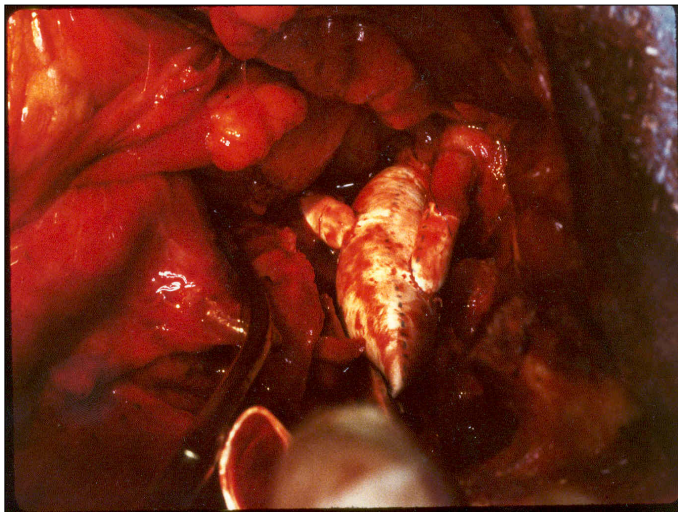
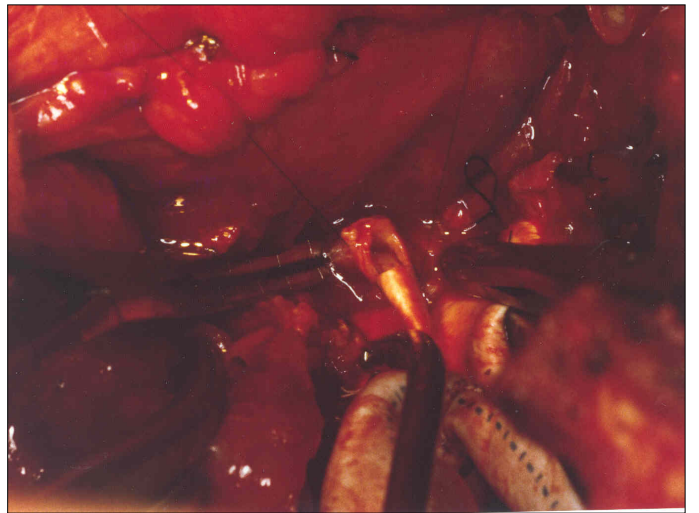
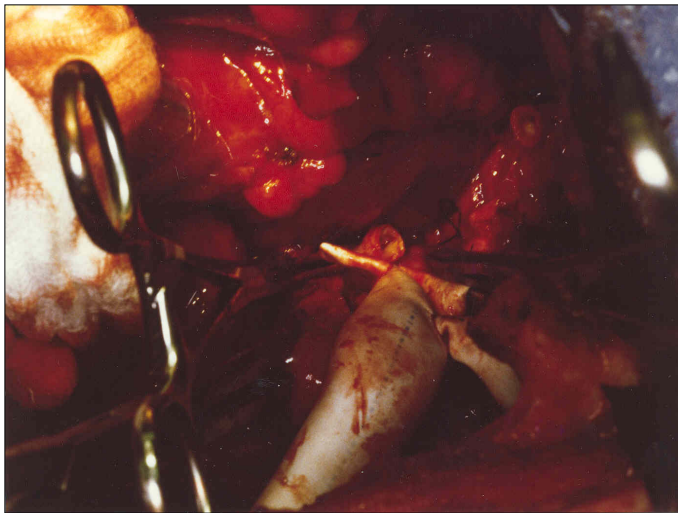
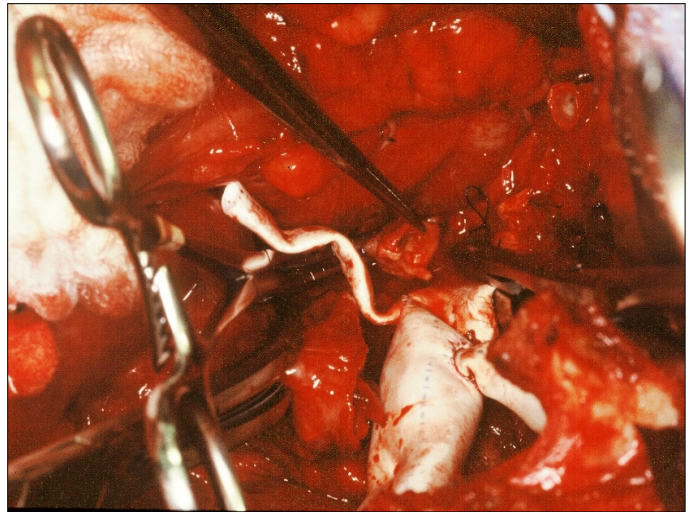
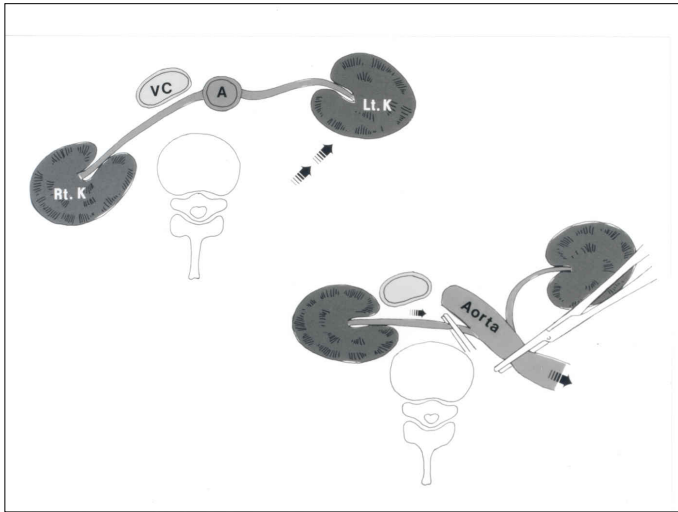
Key Tips
Dissection

- Locate Clamping "Landing Zone"
- Avoid Thrombus/Calcium
- Isolate SMS/Celiac (if Necessary)
- Heparin 30units/kg



Trans Aortic Endarterectomy





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 !

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▪ Thank You !