

CONTROVERSES ET ACTUALITÉS EN CHIRURGIE VASCULAIRE
CONTROVERSIES & UPDATES
IN VASCULAR SURGERY



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Open surgical technique for type IV TAA

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Disclosure

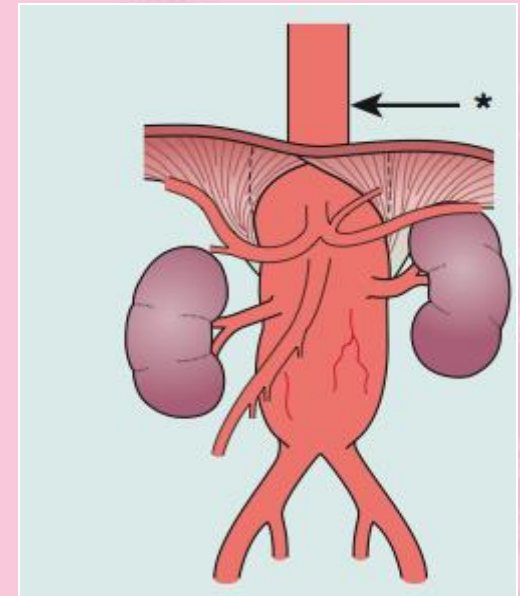
Speaker name:

X CHAUFOR

- ☐ I have the following potential conflicts of interest to report:
- ☐ Consulting
- ☐ Employment in industry
- ☐ Shareholder in a healthcare company
- ☐ Owner of a healthcare company
- ☐ Other(s)
- ☒ * I do not have any potential conflict of interest

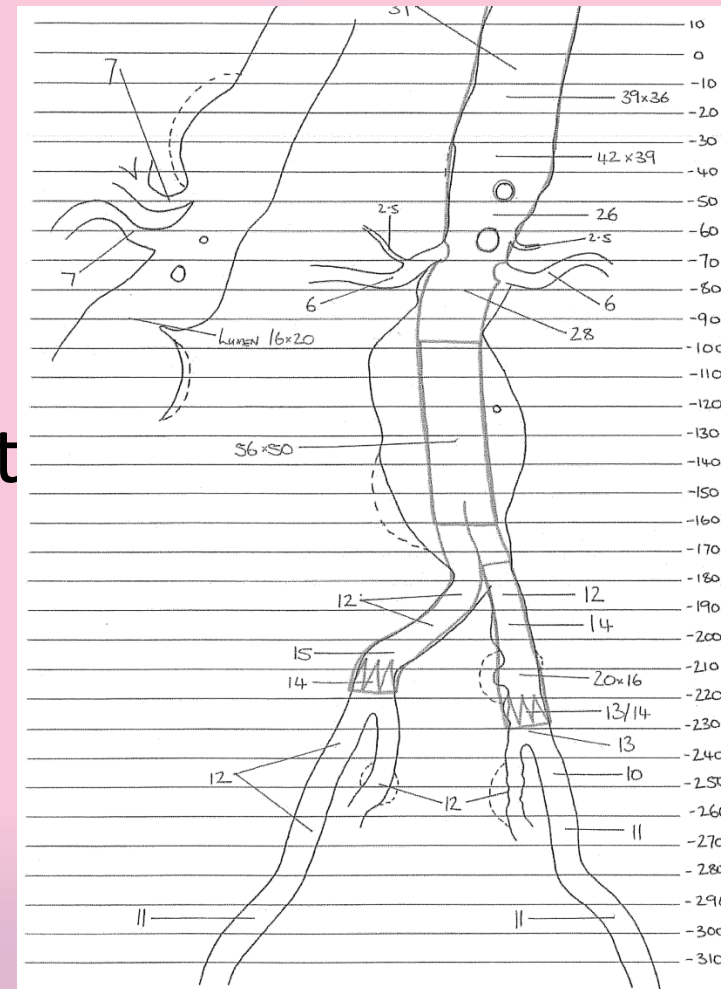
Open surgical technique for type IV TAA

- A great challenge for vascular surgeons :
 - Clamp and Sew
 - 30 minutes Rule
- Reduce visceral ischemia time
- Reduce renal ischemia time
- Reduce blood loss
- Maintaining a high cardiac output and mean arterial pressure > 70 mm-Hg



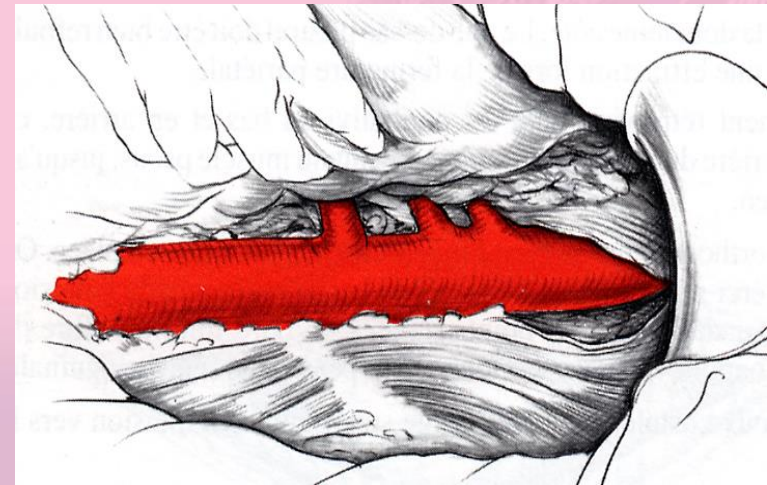
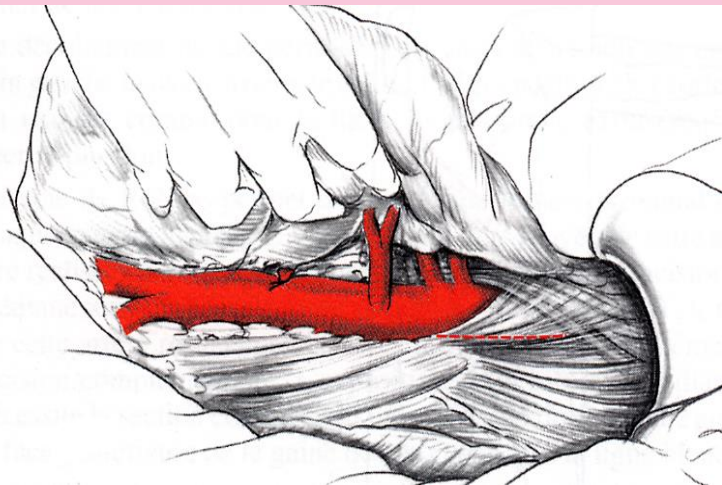
Pre Operative Planning Imaging

- CTA of the aorta has become the gold standard for preoperative imaging.
- Preoperative planning study as for a fenestrated endograft procedure



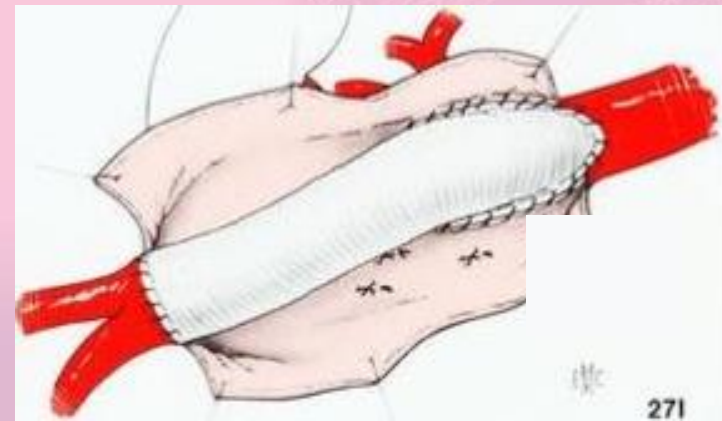
Thoracoretroperitoneal Approach

- Right lateral decubitus for a thoracoretroperitoneal retrorenal approach in the nine or tenth intercostal space without resection of rib.
- A short anterior diaphragm incision /full dissection of the left crus ligament.



Thoracoretroperitoneal Approach

- The use of a self-retaining retractor allows short incision with stable operative field.
- The clamp-and-sew technique was used for all operations
- one beveled proximal anastomosis incorporating the descending thoracic aorta, celiac, superior mesenteric artery, and right renal arteries origins.



Renal Protection

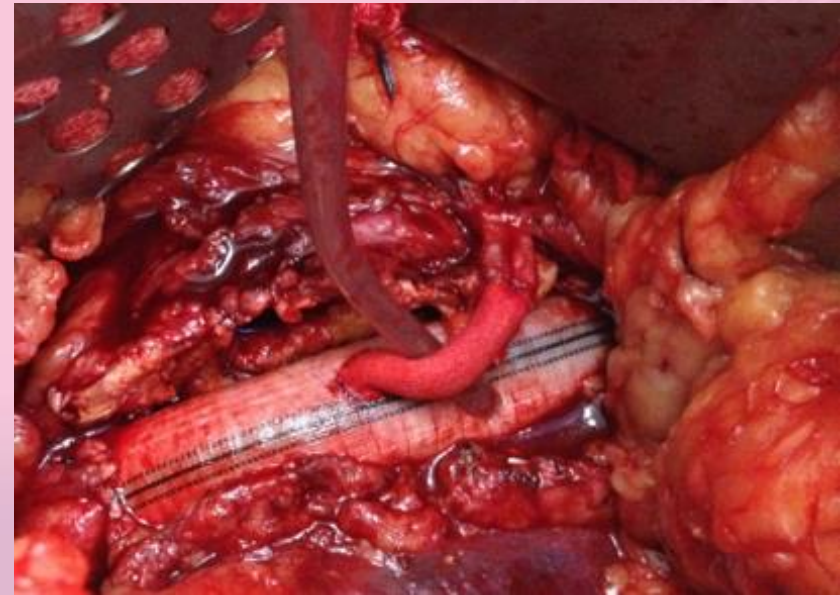
- Uncomplicated repair has a low risk of renal failure requiring dialysis in patients without preoperative renal dysfunction or renal artery stenosis.
- Under these conditions intraoperative renal protection is not needed
- Uncomplicated repair has a minimal risk of neurological injury

Renal Protection

- In case of preoperative renal failure, or renal artery stenosis, each kidney is perfused with 300 mL of cold ($+4^{\circ}\text{C}$) Ringer's lactate solution
- Infusion is undertaken for 4 - 5 min at 150 mm-Hg.
- Maintaining a high cardiac output and mean arterial pressure > 70 mm-Hg during and after surgery

Left Renal Artery Strategy

- a side-arm graft pre sewed to main graft to reduce left renal ischemia time
- Direct reimplantation of the left renal artery into the main graft is often to close to the proximal suture line





Results TAA type IV

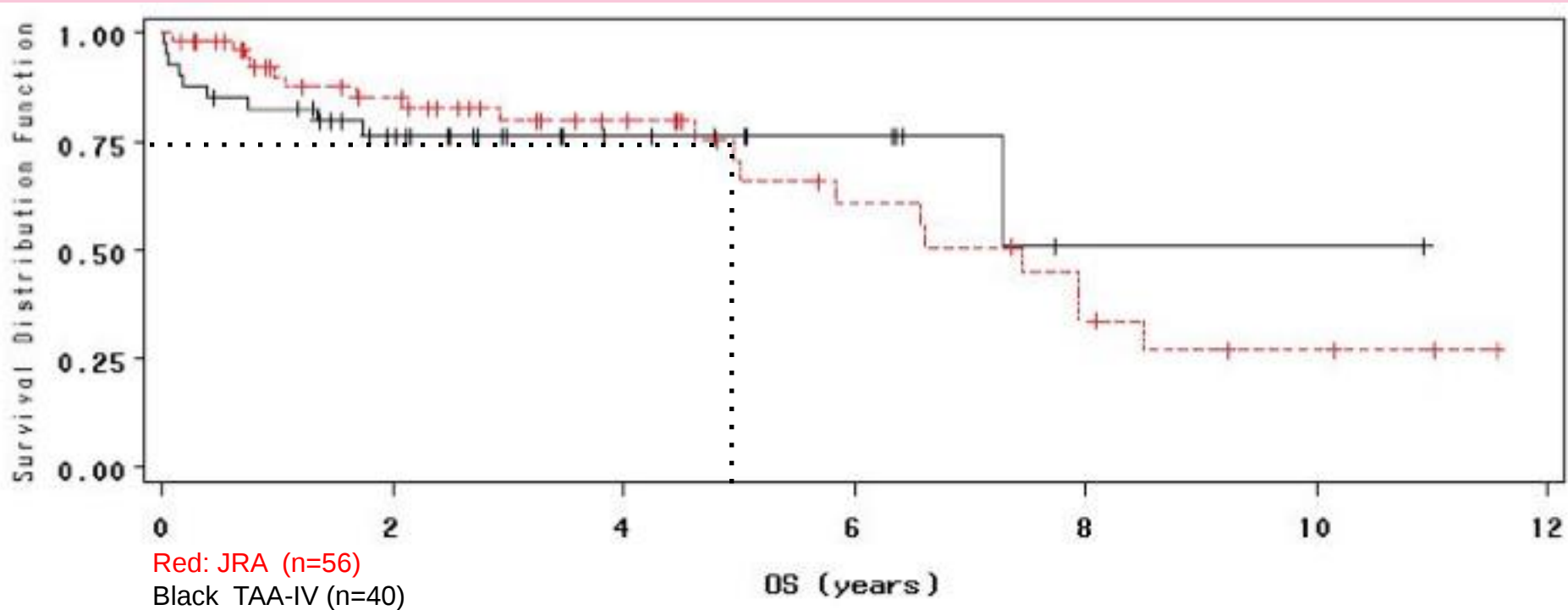
<i>1^{er} auteur</i>	<i>Année</i>	<i>N</i>	<i>Mortalité 30 jours %</i>	<i>Dialyse aiguë %</i>	<i>Paraplégie %</i>
Gilling-Smith	1995	63	15	14	0
Schwartz	1996	58	5	9	3
Martin	2000	96	11	12	0
Lemaire	2001	207	4	5	1
Cinà	2002	42	5	14	0
Bicknell	2003	130	17	15	4
<i>Notre Etude</i>	2012	40	7,5	12,5	0

- Mortality: **4 -17%** 7,5%
- Acute Dialysis **5 - 15%** 12,5%
- Paraplegia: **0 - 4%** 0%

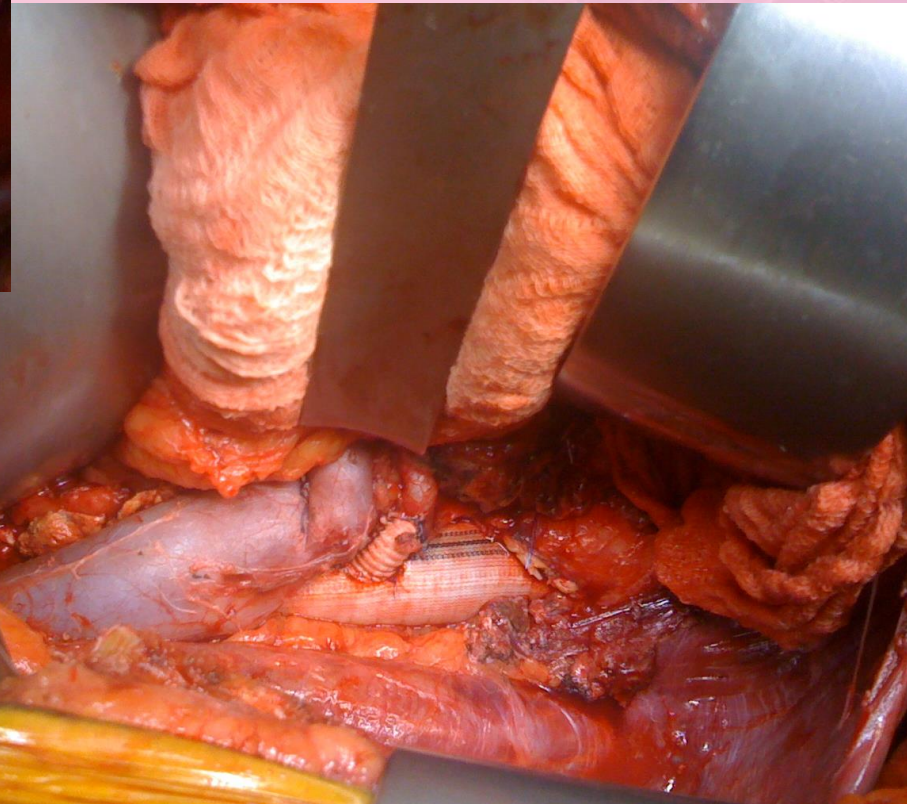
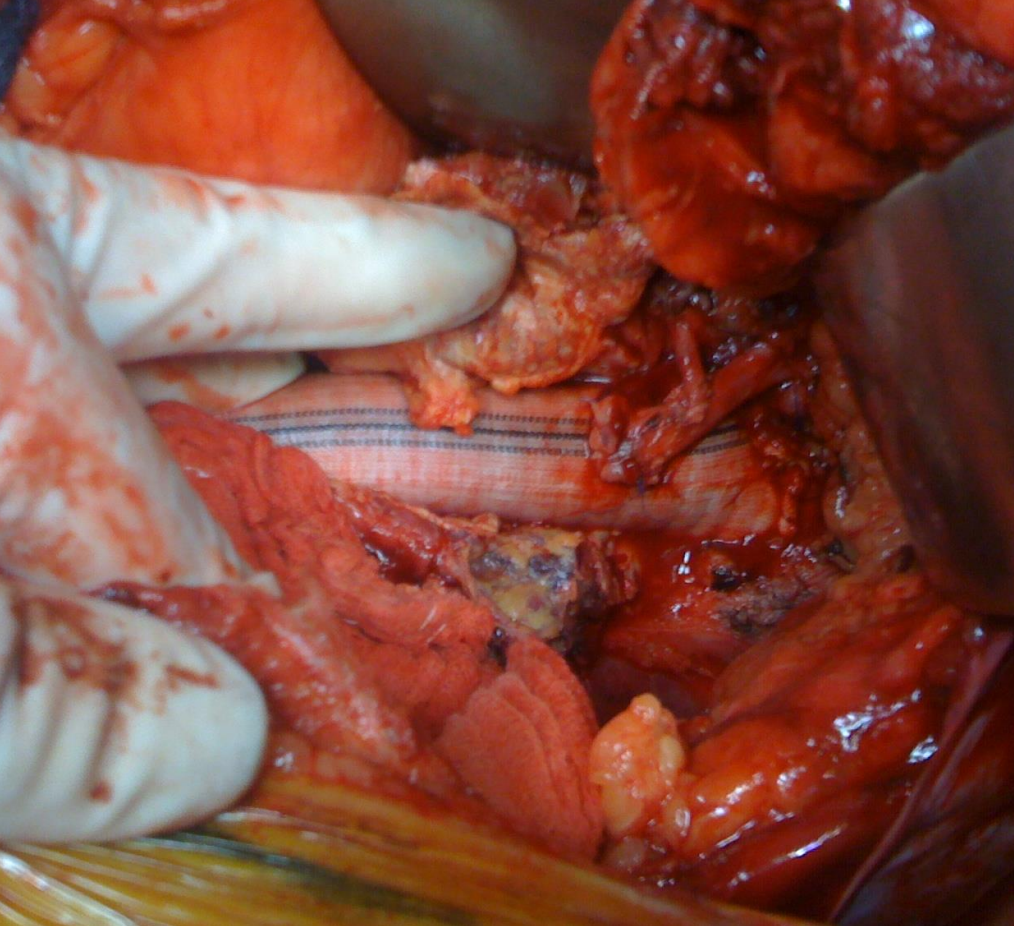
0%

Long Term Survival

- JRA Versus TA type IV



75,5 months (de 0,1 à 140,9 months)
2 Year Survival 85,2% - JRA- Vs 76,4% TAA-IV
5 year Survival: 75,2% - JRA Vs 76,4% - TAA-IV



Conclusions

- A simplified operative approach for type IV TAAA repair is associated with favorable perioperative results.
- Literature and own datas refute the need for surgical adjuncts commonly applied in more extensive TAAA and indicate that the hybrid operation is an illogical posture.
- Long-term survival equates that observed after routine AAA repair.