

Acute type B dissection: is closure of the proximal tear sufficient ?

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Disclosure

Speaker name: **Jean-Marc ALSAC**

I do not have any potential conflict of interest

TEVAR in acute TBAD

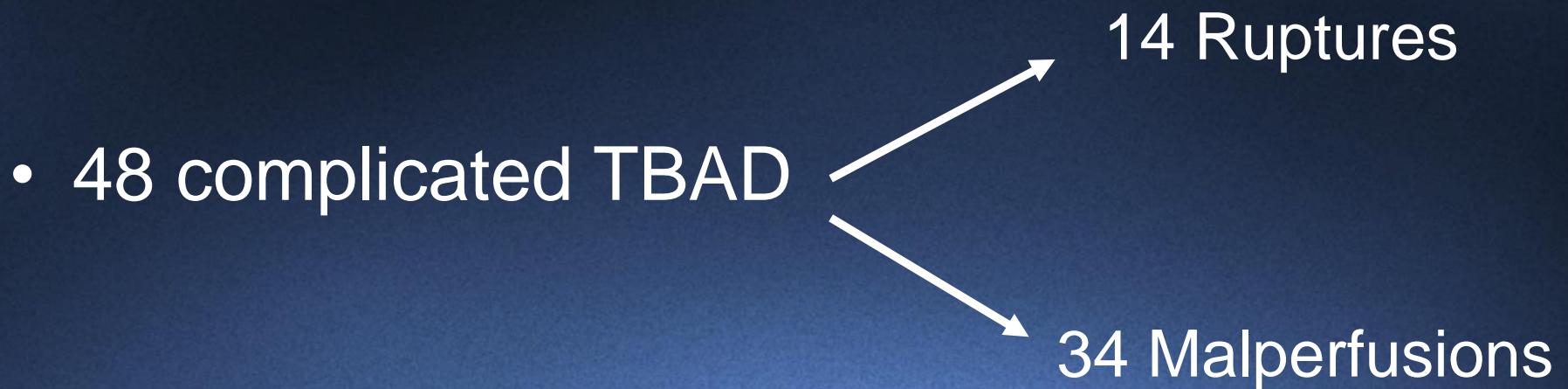
- Is closure of the proximal tear sufficient to :
- Treat Complications
 - Rupture
 - Malperfusion
- Prevent aneurysmal progression

White RA, Miller DC, Criado FJ, Dake MD, Diethrich EB, Greenberg RK, et al. Report on the results of thoracic endovascular aortic repair for acute, complicated, type B aortic dissection at 30 days and 1 year from a multidisciplinary subcommittee of the Society for Vascular Surgery Outcomes Committee. J Vasc Surg 2011;53: 1082-90.

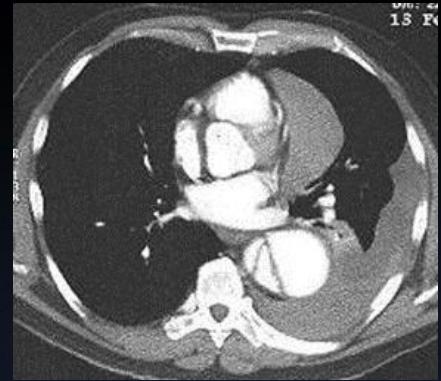
Nienaber CA, Kische S, Rousseau H, Eggebrecht H, Rehders TC, Kundt G, et al.; INSTEAD-XL trial. Endovascular repair of type B aortic dissection: long-term results of the randomized investigation of stent grafts in aortic dissection trial. Circ Cardiovasc Interv. 2013 Aug;6(4):407-16.

5 years of SOS Aorta program

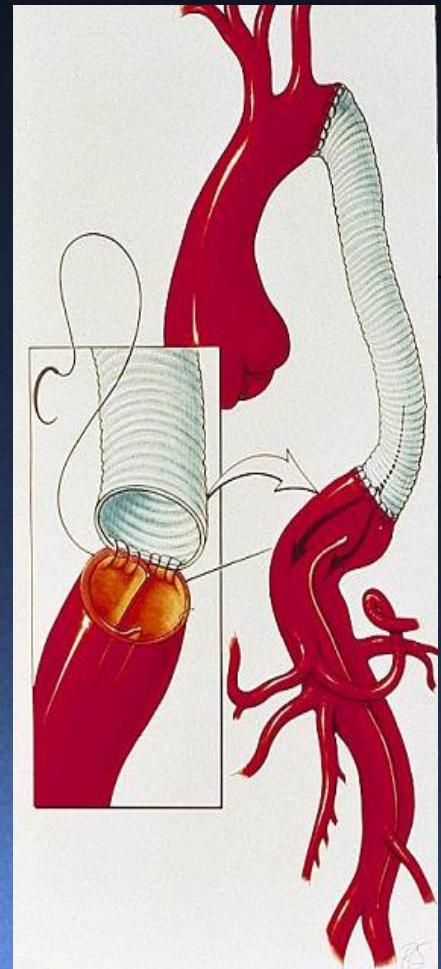
- 75 Acute TBAD → IH mortality = 5.3 %



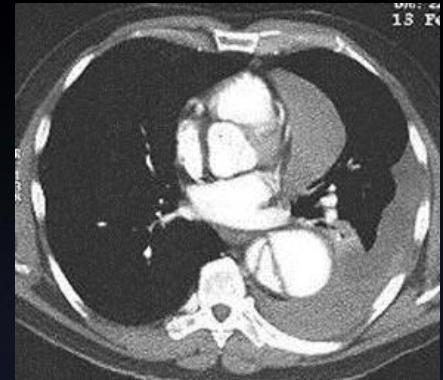
Aortic Rupture



- Extreme Emergency
- Challenging TEVAR
- Total exclusion of the ruptured false lumen :
 - Closure of proximal entry tear
 - Closure of distal entry tear(s) (ex-exit)



Aortic Rupture

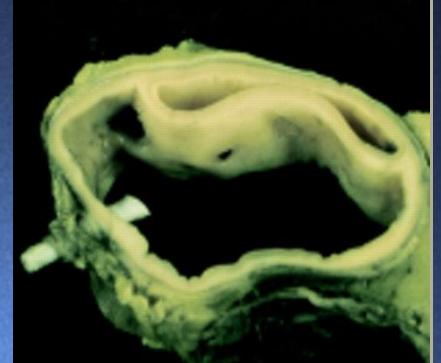
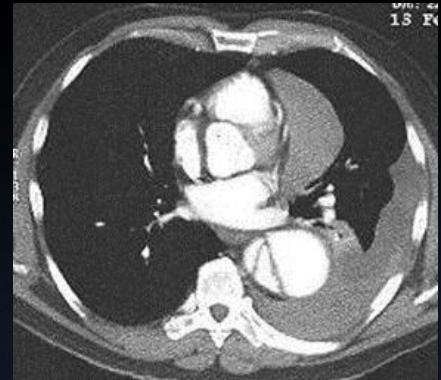


- in case of limited thoracic extension
- Long stentgrafting alone

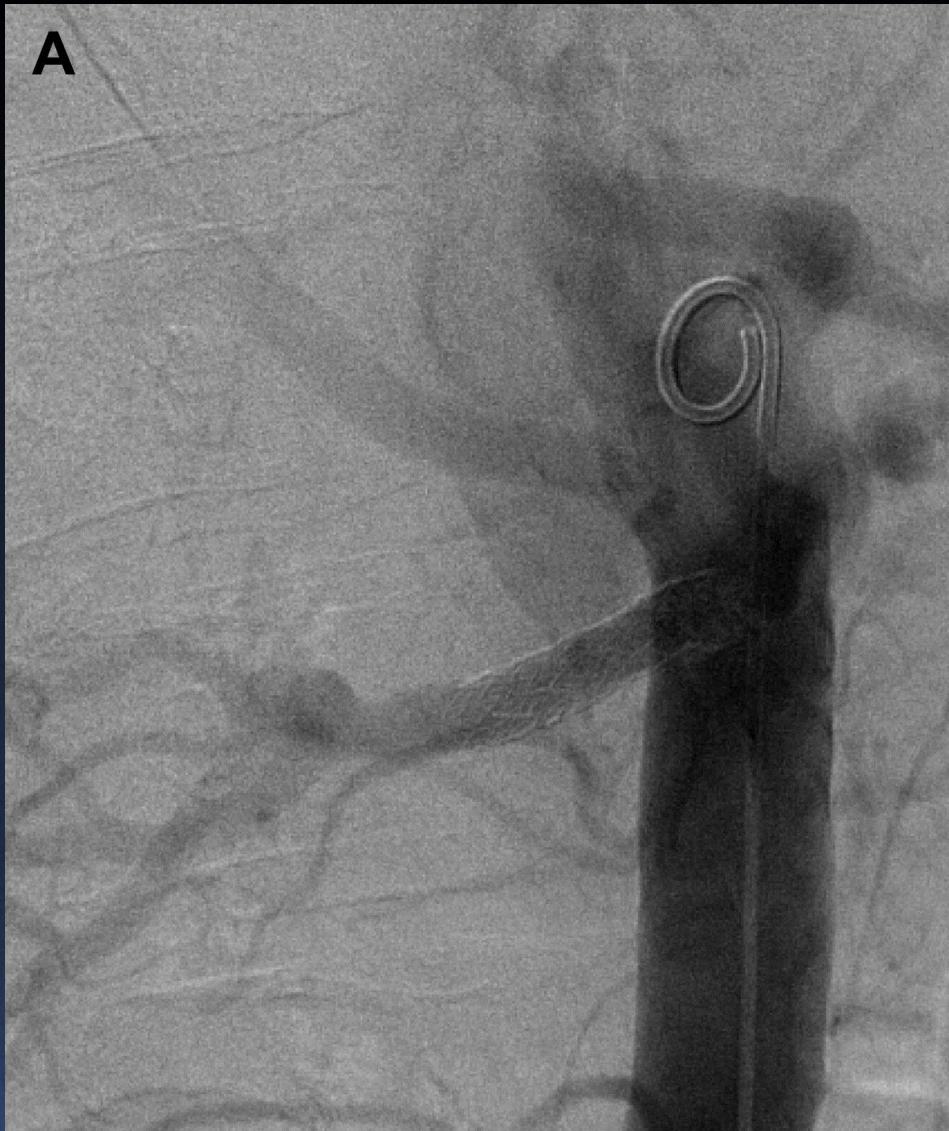
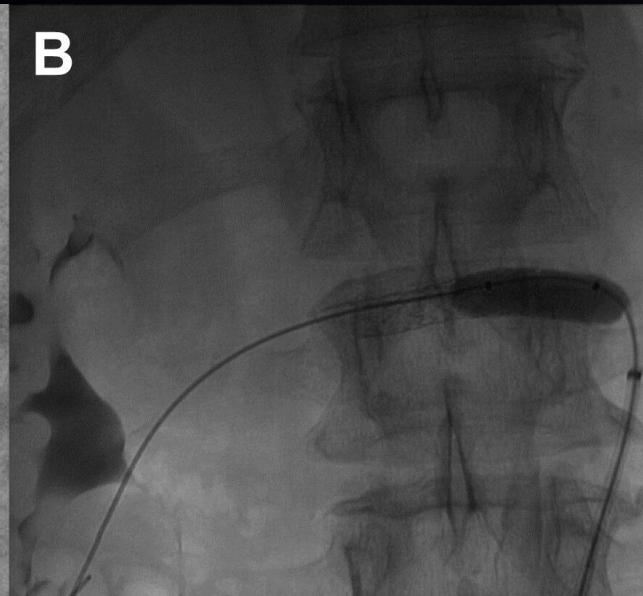
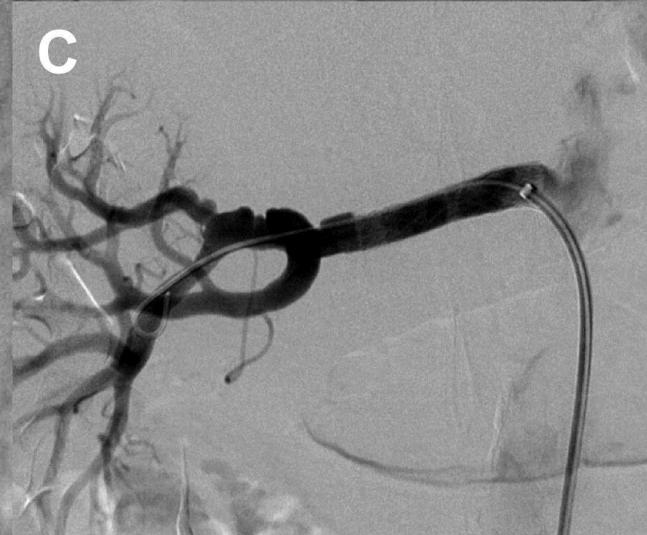


Aortic Rupture

- In case of distal tear at the level of visceral arteries





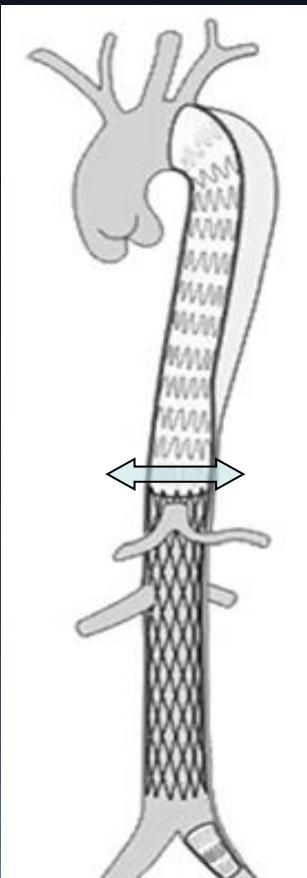
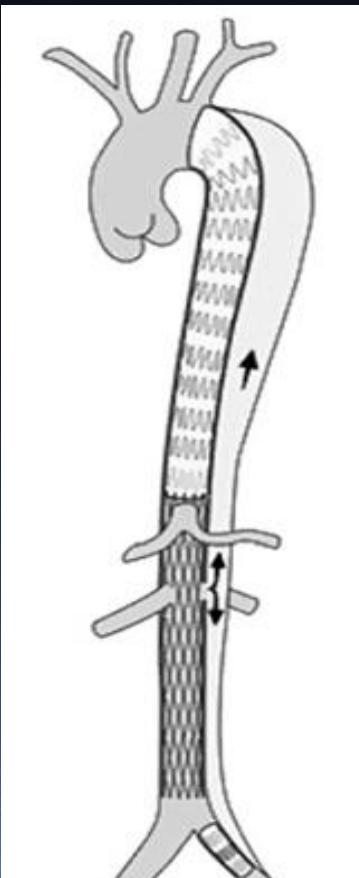
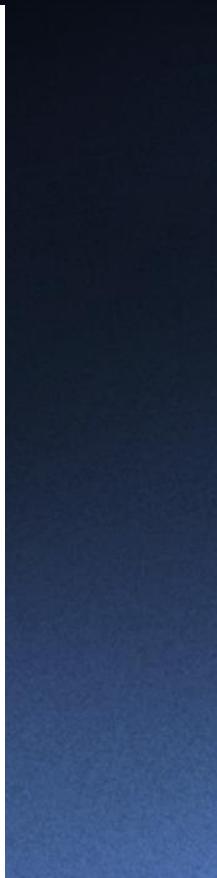
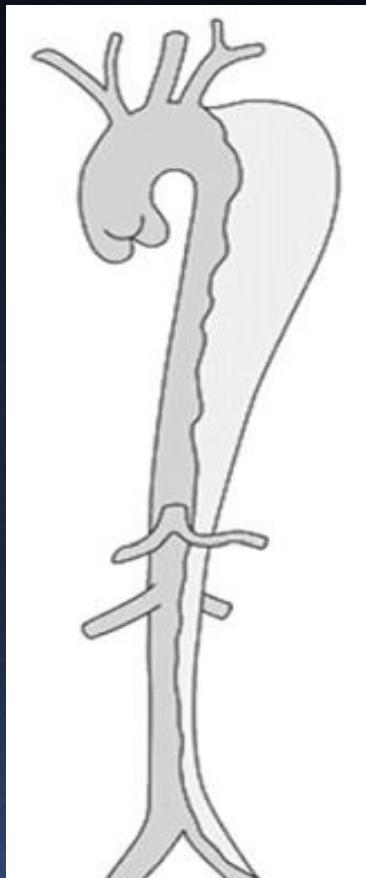
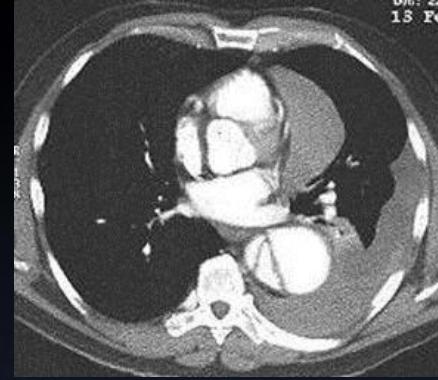
A**B****C**

Spot Stenting

Bel A, Alsac JM, Baïssas V, Julia P, Fabiani JN. Spot stenting of the tear in type B aortic dissection. Ann Vasc Surg 2013;27:671.e1-6.

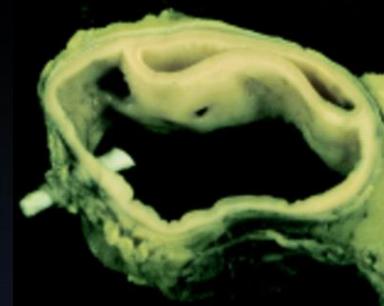
Aortic Rupture

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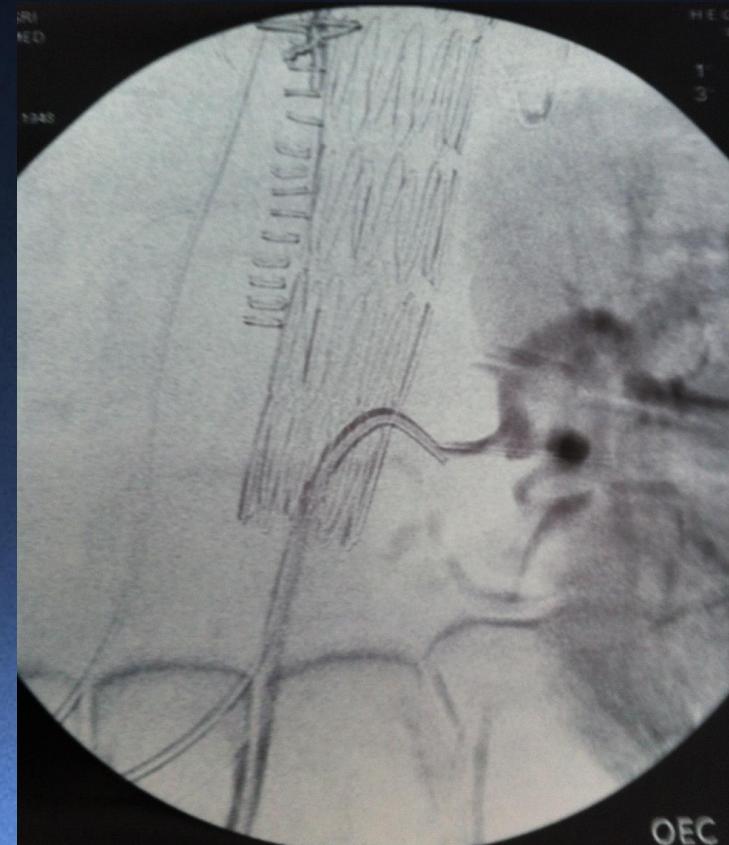
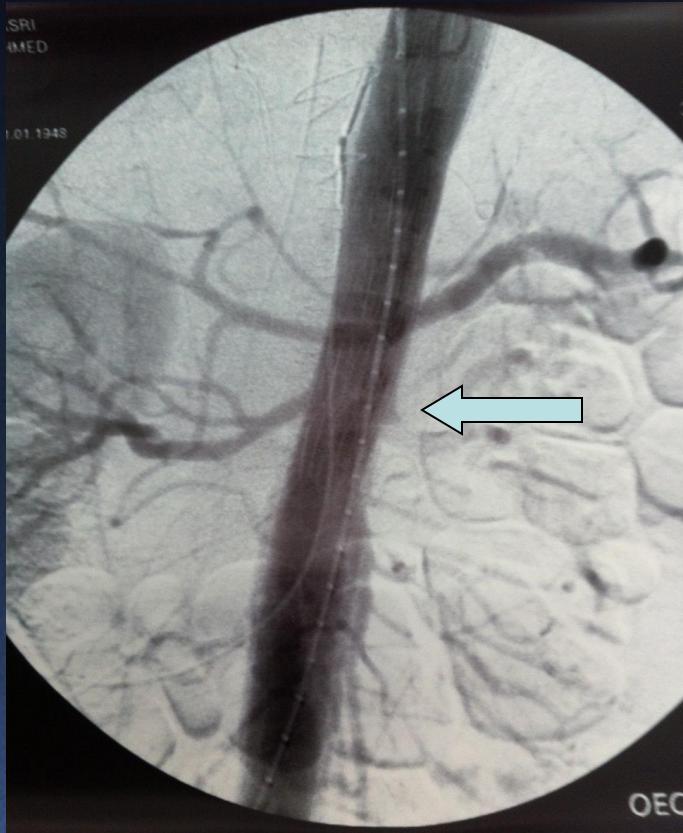


**Stent-Assisted Balloon-Induced Intimal Disruption and Relamination
in Aortic Dissection Repair: The STABILISE concept**

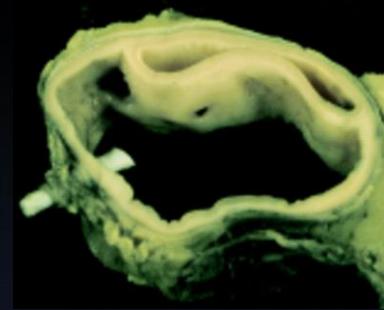
Static Malperfusion



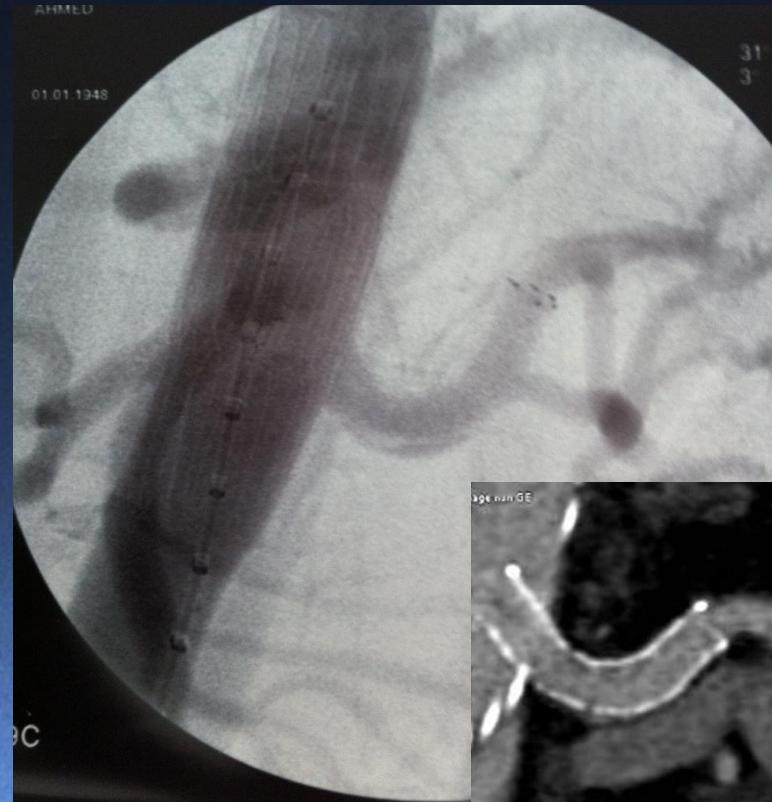
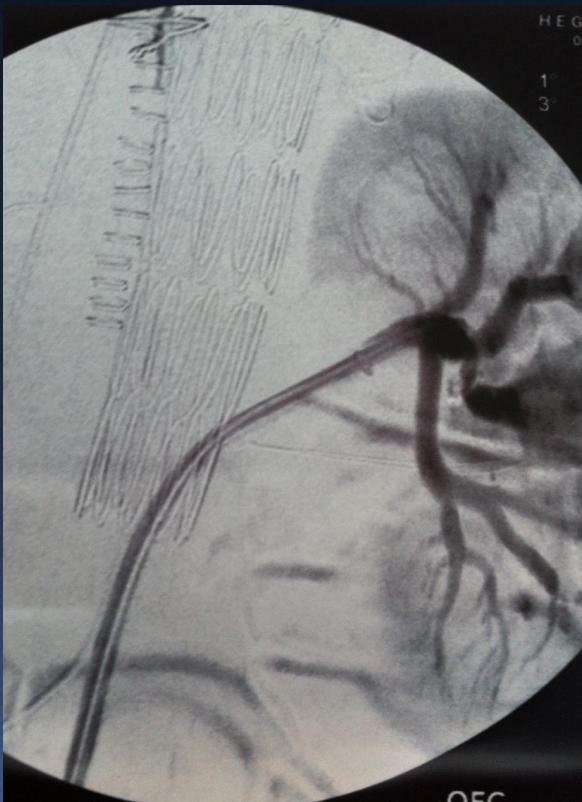
- Catheterisation through the non covered stent



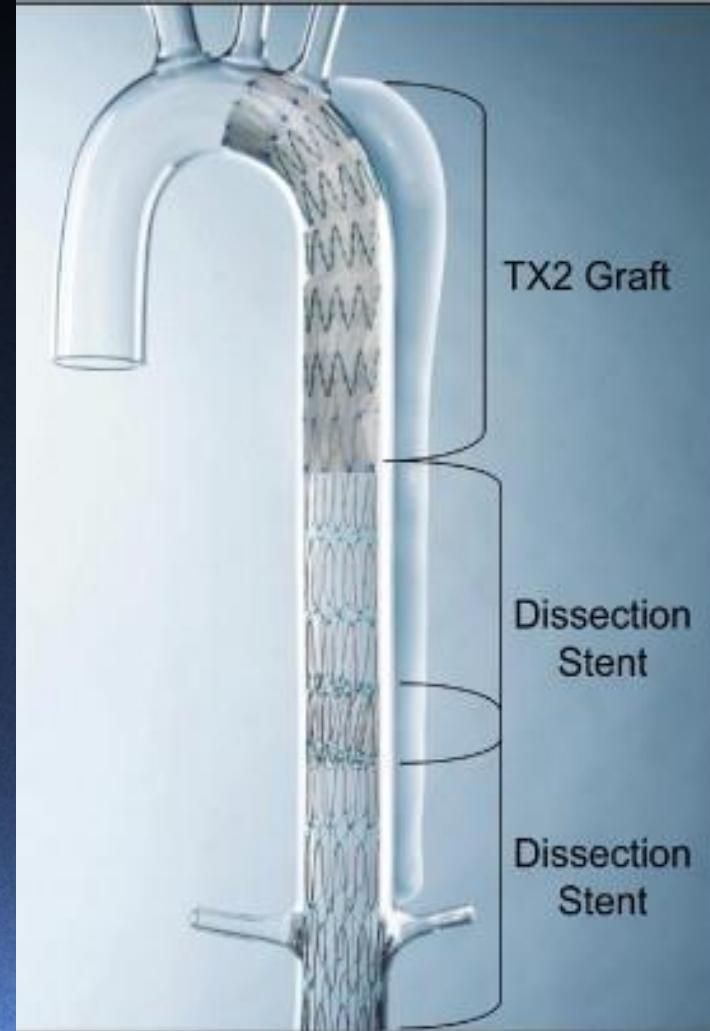
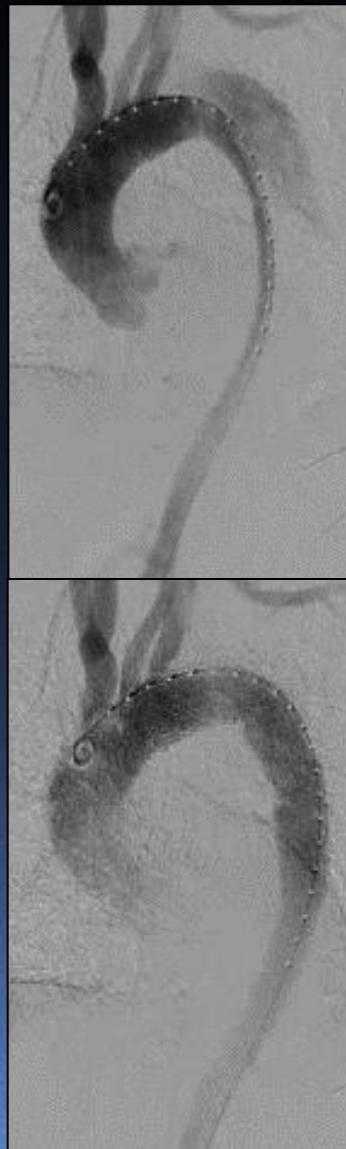
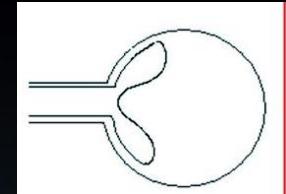
Static Malperfusion



- Renal stenting through the aortic stent

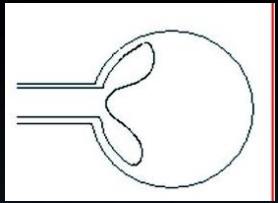


Dynamic Malperfusion

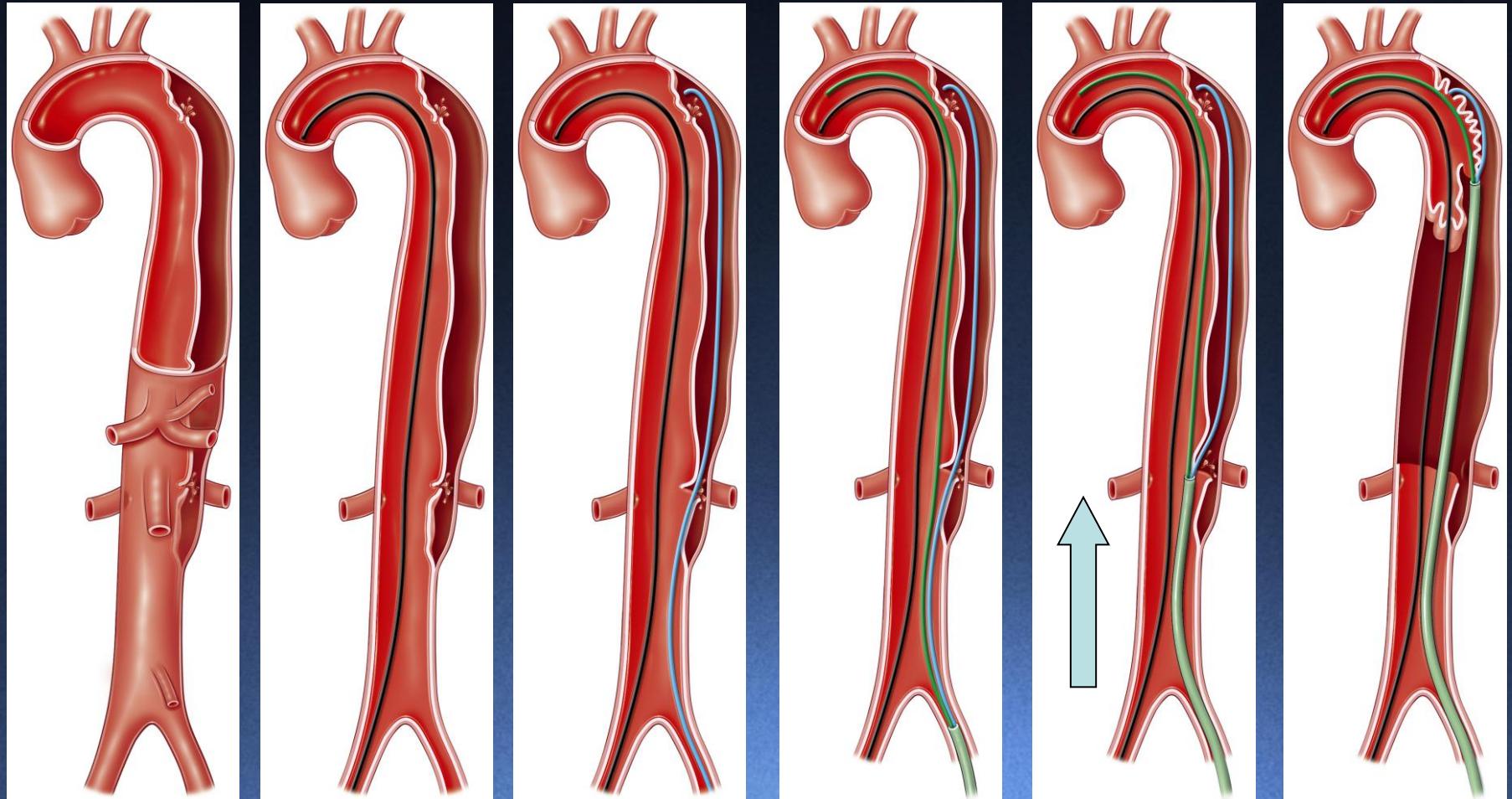


Experience of the Zenith Dissection Endovascular System in the emergency setting of malperfusion in acute type B dissections JVS in press

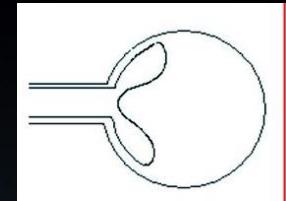
Dynamic Malperfusion



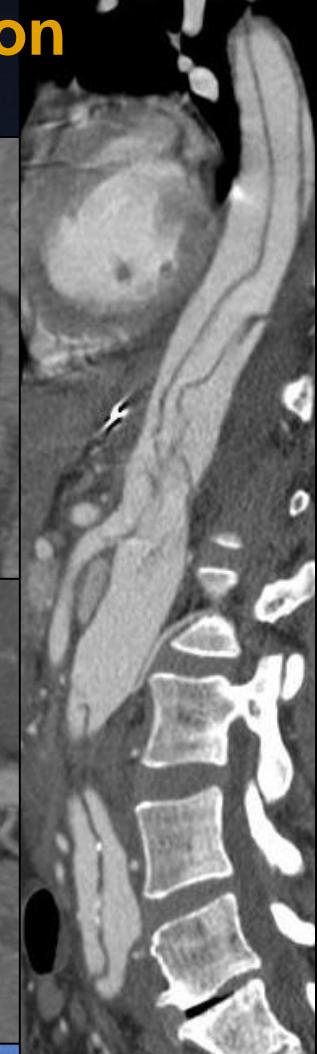
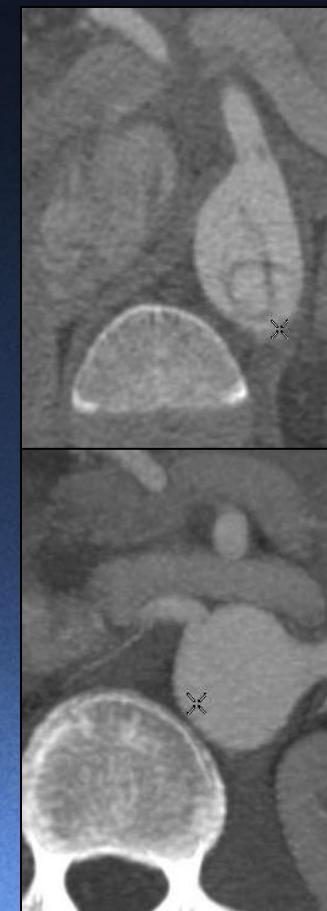
- Endovascular retrograde Fenestration



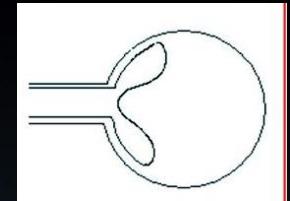
Dynamic Malperfusion



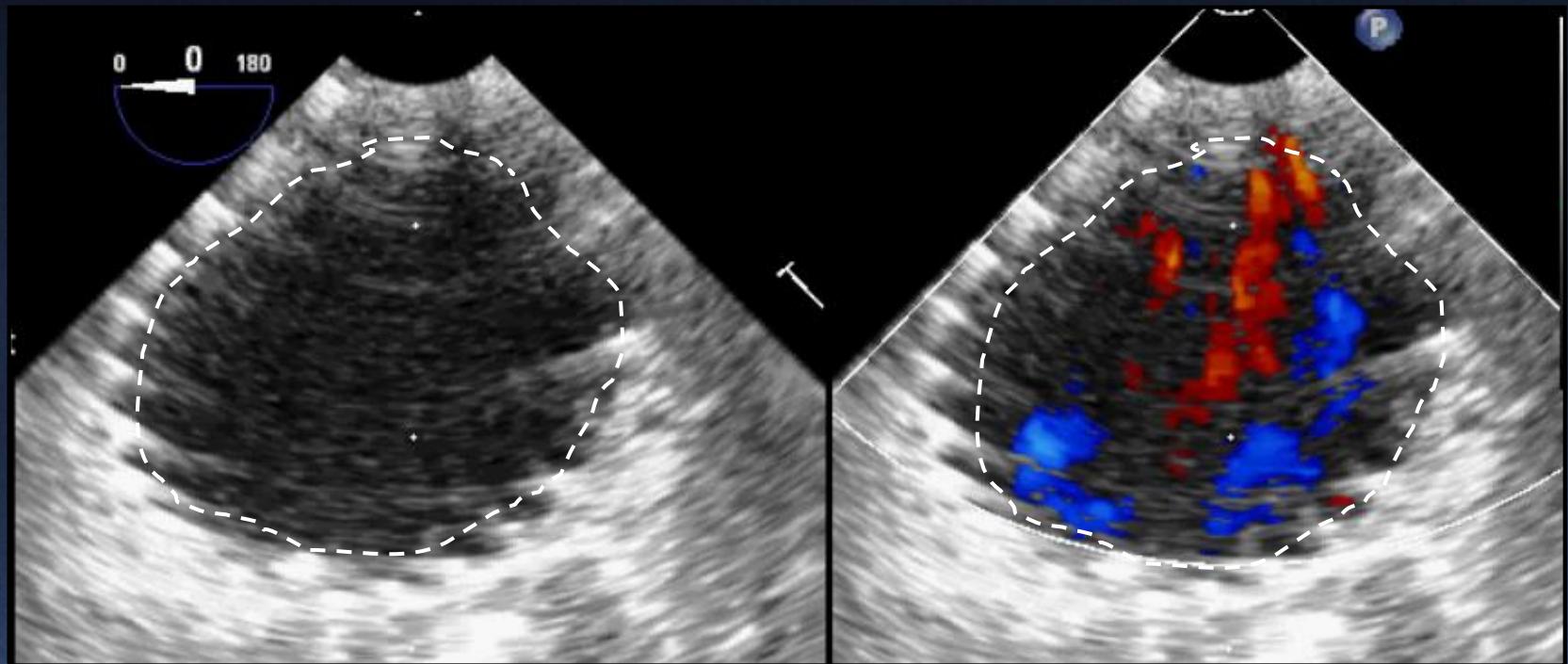
- Endovascular retrograde Fenestration



Dynamic Malperfusion



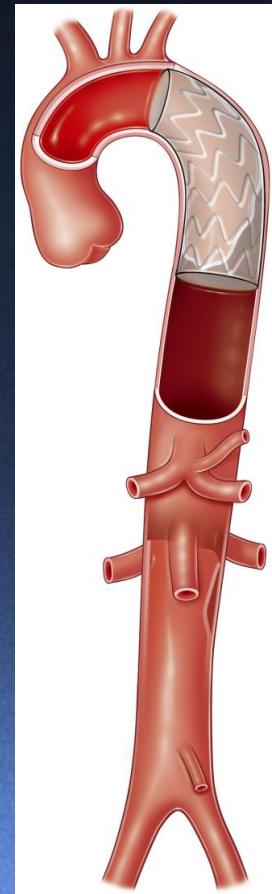
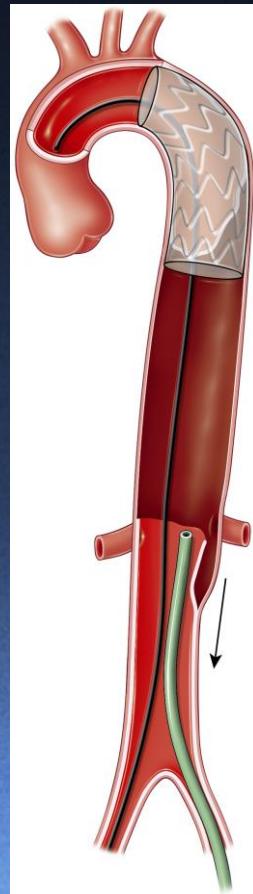
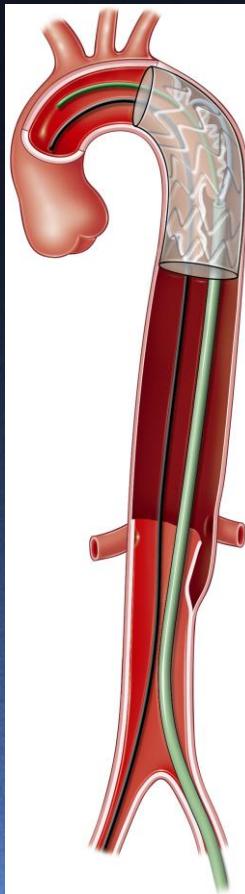
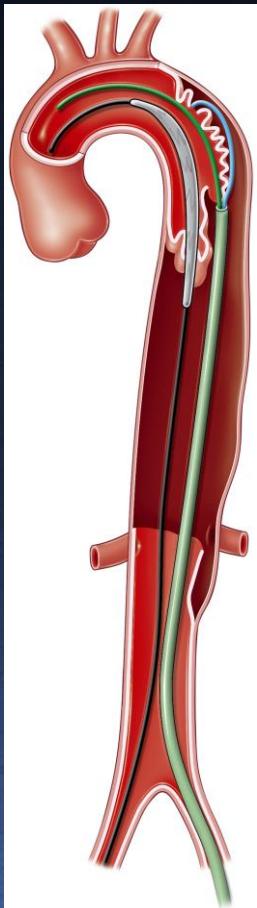
- Exclude Fenestration Flap



Malperfusion dynamique

- DEFINITE Technique :

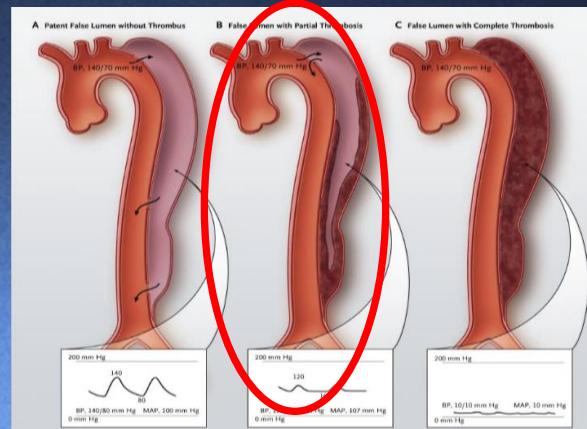
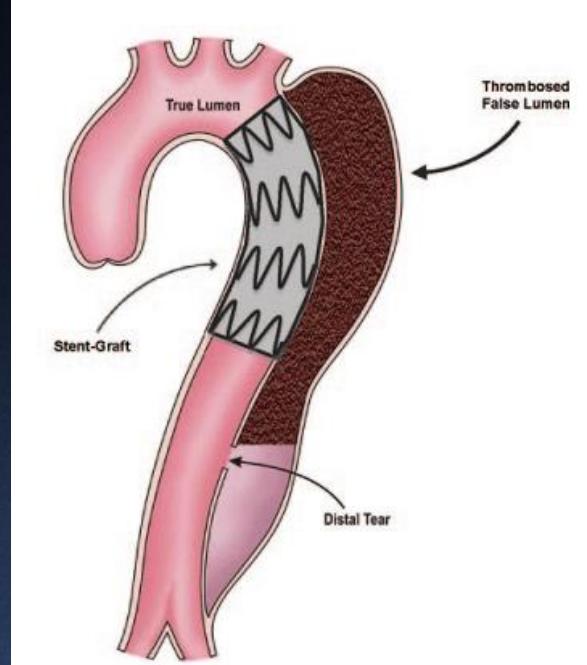
Distal Endovascular Fenestration INside Thoracic Exclusion



Prevent aneurysmal progression

- **ADSORB** : < 14 d
- **INSTEAD** : 15 d < - < 3 mo

2 y follow-up	72 TEVAR	68 BMT	P
Thrombose Remodeling	91.3 %	19.4 %	.001
Survival	88.9	95.6	.15



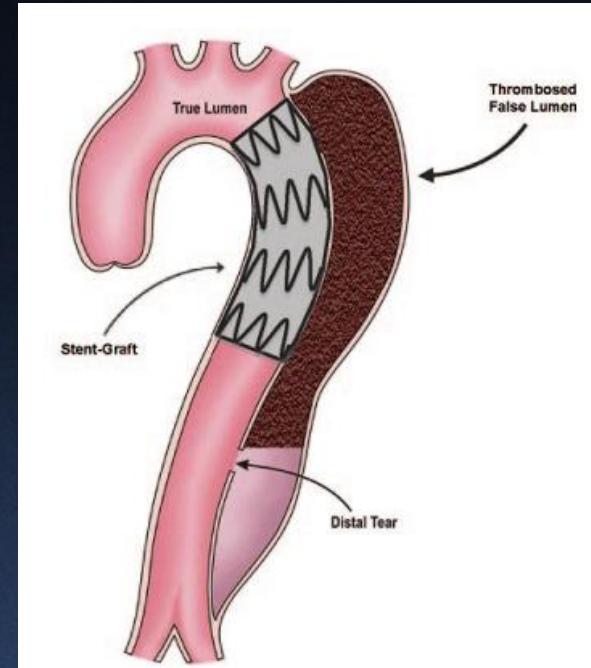
- **IRAD NEJM 2007 :**
32 % Mortality at 3 years

Prevent aneurysmal progression

- INSTEAD XL : 5 years results

Circ Cardiovasc Interv 2013

5 y Follow-up	72 TEVAR	68 OMT	P
Aneurysmal progression	27.0 %	46.1 %	.04
Aortic related Mortality	6.9 %	19.3 %	.04

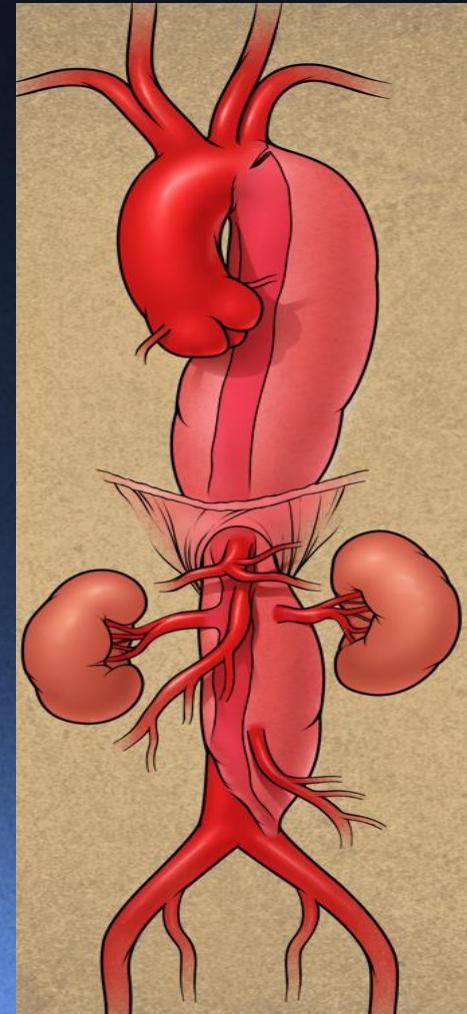


Closure of the proximal tear is **efficient**

but **not sufficient**

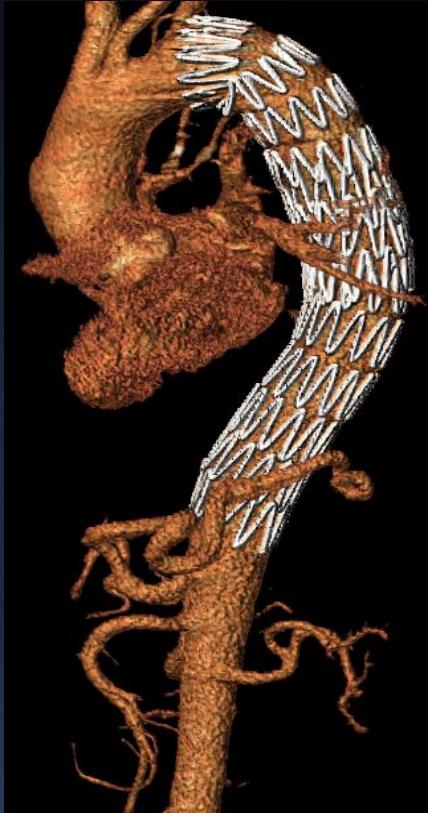
Conclusion

- **Closure of the proximal tear in TBAD is :**
 - Efficient
 - Validated
 - Reproducible
 - But not always sufficient (50 %)
 - Especially for extensive dissections



Conclusion

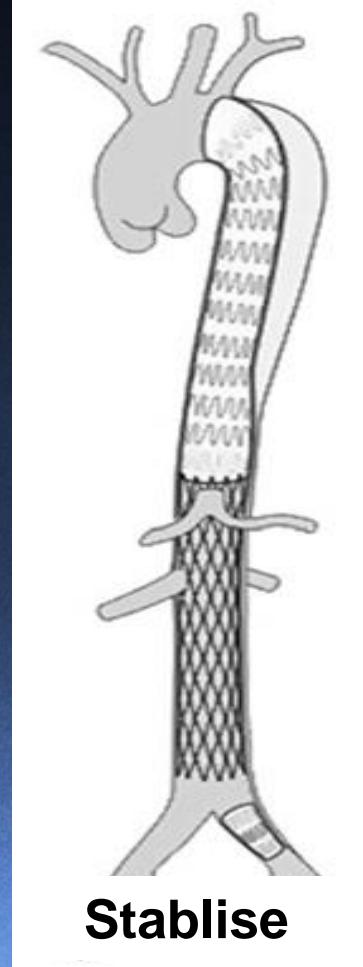
- **Adjunct procedures on distal tears**



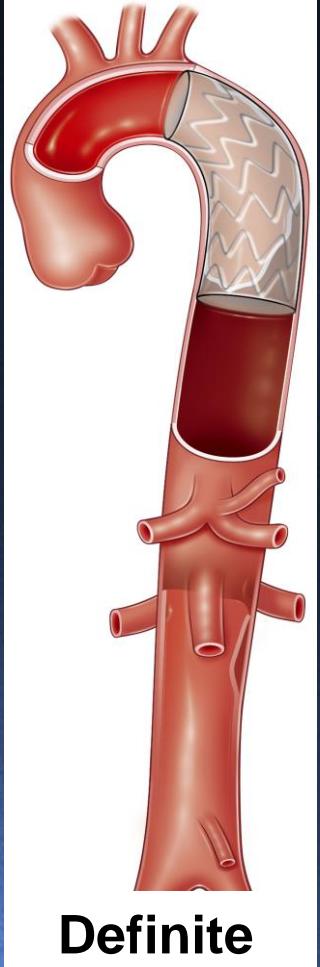
**Extensive
Stentgraft**



**Spot
stenting**



Stabilise



Definite

Thank you for your attention

