




## Re-Entry Specific Endovascular Therapy (RESET), i.e. TEVAR Plus Dealing With Re-Entry Tears: It Promotes False Lumen Thrombosis, Aortic Remodeling And Improves Outcomes: How To Do It


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




## Disclosures

Consultant: Endospin, Getinge, Medtronic Inc, Penumbra, Terumo Aortic, Philips, WL Gore  
Speakers' Bureau: Medtronic Inc., Penumbra, Terumo Aortic, WL Gore  
Advisory Board: Endoron, Endospin, Medtronic Inc., Philips

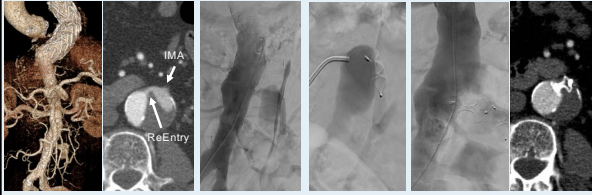





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## RESET: Case Study after TEVAR

2 yrs s/p TEVAR For aTBEAD Expanding TAAA	Reentry at the IMA Perfusion of FL	Aortogram: Contrast in FL And into IMA	Plug embolization of the IMA with Amplatzer	Plug embolization of the reentry with VSD	Post RESET CTA Thrombosed FL Decreased TAD
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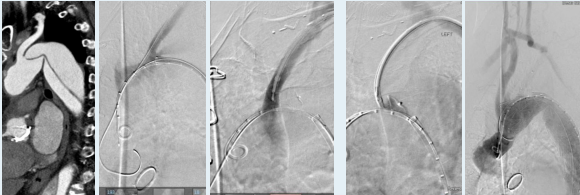









## RESET: Case Study during TEVAR

S/p Ascending replacement for TAAD, now with expanding DTA  
Zone 1 TEVAR after hemiarach debranching

Entry tear by the LSA with aortic buckling with possible seal compromise	ASD partially deployed into the FL	Completion arch study
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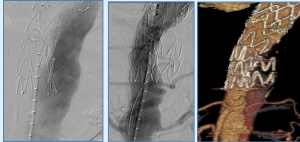
## RESET: ReEntry Specific Endovascular Therapy




The goal is to use endovascular techniques to specifically target and eliminate reentry tears to induce false lumen thrombosis, obtain positive aortic remodeling and avoid more complex aneurysm repair

False Lumen Therapy

1. Stop retrograde FL perfusion
  - Knickerbocker
  - Candy Plug or Iliac Occluder
2. Cause FL thrombosis by embolization
  - Coils
  - Plugs
3. Eliminate Reentries: RESET




Stopping retrograde FL perfusion with iliac occluder



## RESET: Treatment Principles


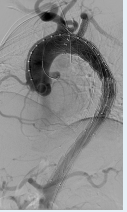

- TEVAR to cover the primary entry tear is paramount
- Reentries amenable to TEVAR should be covered
- RESET can be applied as stand alone therapy or in combination with TEVAR or other FLT
- RESET is applicable when there is a limited number of reentries
- RESET for reentries involving branch vessels is done with covered stents
- RESET for reentries involving the aorta is done with ASD or VSD occluders (Structural Heart)
- RESET for distal aortoiliac reentries is done with EVAR, IBE or covered stents

**RESET: Case Study: How to fix a TAAA with an 8Fr Sheath**

Zone 2 TEVAR with LSA Laser Fenestration  
For rapidly expanding c TBAD

Returns to ED 2 years later  
Abdominal & back pain  
High Frailty

Uneventful recovery and discharged POD # 5

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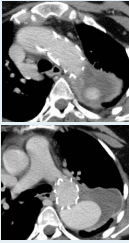
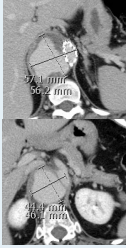
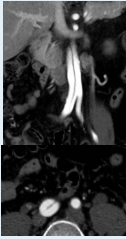
No proximal type I endoleak

8 cm proximal thoracic aneurysm

6 cm Distal thoracic aorta

5cm paravisceral aorta

Distal right iliac reentry



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Small retro SMA reentry

Options:

1. Open TAAA repair
2. Visceral debranching & aortoiliac graft with staged TEVAR
3. FEVAR 5 vessels
4. ChEVAR 5 vessels
5. RESET

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Paravisceral aortogram

Paravisceral aortogram with iliac reentry occlusion

RAO view of Paravisceral reentry angiogram

Catheterization of the false lumen

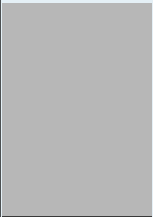
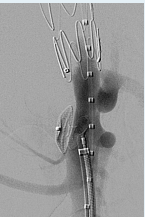
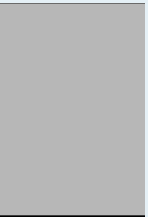
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Obliteration of the reentry after septal plug deployment

covered stent for iliac reentry

Completion angiogram

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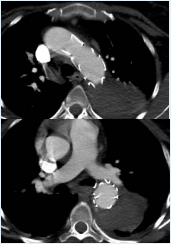
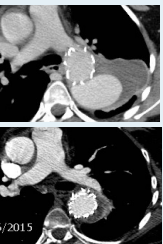

Thrombosed false lumen

8 cm proximal thoracic aneurysm with patent false lumen

3 cm proximal thoracic aneurysm with thrombosed false lumen

CTA @ 4 months

CTA @ 9 year Complete aortic remodeling

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RESET: Summary

RESET is a technique to induce false lumen thrombosis in chronic TBAD by targeting and eliminating reentries causing false lumen pressurization

RESET requires high quality imaging to identify reentries and is feasible when the number of reentries is limited

RESET is an effective and durable technique to treat aneurysm from chronic TBAD in a minimally invasive manner



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