Type II Endoleak – Decision Making, Tips and Tricks

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Disclosures

none
Introduction

Incidence rates reported: 8-45%

O´Connor et al. 2015; Semin Intervent Radiol 32:272-277

Fact is: T2EL are most common.
Rationale of conservative management

35-75% of all type II endoleaks disappear within 6 months


If T2EL persist after 6 months, likelihood of aneurysm sac expansion increases:
24-52% vs 13%

Good things come to those who wait

24 months  36 months  48 months
When should we treat?

- **Aneurysm sac growth ≥ 5 mm in surveillance imaging**
  
  

- **Risk factors?**
  
  
  
The topic of this month is called Endoleaks - Case-based Solutions. More information to the discussion will be provided on Thursday, January 30, 2020 in Lecture Hall 2.

Do you think that type 2 endoleaks can lead to aneurysm rupture?

- Yes: 79%
- No: 21%

Your participation will provide us with valuable insights, which will challenge the experts during the upcoming lecture.
Risk factors for reinterventions

• Number and diameter of lumbar arteries


• Patency and size of the IMA

Samura M, Morikage N, Otsuka R et al. Endovascular Aneurysm Repair with Inferior Mesenteric Artery Embolization for Preventing Type II Endoleak: A Prospective Randomized Controlled Trial. Ann Surg. 2020;2:238-244

Arko FR, Rubin GD, Johnson BL et al. Type-II endoleaks following endovascular AAA repair: preoperative predictors and long-term effects. J Endovasc Ther 2001;8:503-510

• Thrombus

The topic of this month is called ENDOLEAKS-CASE-BASED SOLUTIONS. More information to the discussants of the session will be given on Thursday, January 30, 2020 in Leipzig, during the session. The survey will help to answer the questions and to inform the experts of all type of endoleaks. Your participation will provide unique data for the survey. 

Are you performing a pre-embolisation of large inferior mesenteric arteries to prevent a type 2 endoleak before EVAR?

- Yes: 21%
- No: 79%
Persistent EL in CT after 12 mo

Triphasic CTA, CEUS reveals T2EL

- Growth < 5 mm
- Growth > 5 mm

No EL

Yearly FU

Treatment
How could we treat?

- **Transarterial**

- **Translumbar**

- **Para endograft**

- **Transcaval**

- **Surgical ligation of feeding vessel**
How do you treat type 2 endoleaks post EVAR?

- CT-guided puncture of the aneurysm sac: 0%
- Onyx embolization of the responsible vessel: 14%
- Coil embolization of the responsible vessel: 7%
- Onyx and coil embolization of the sac and the responsible vessel respectively: 79%
- Laparoscopic ligation of the responsible vessel: 0%
- Open surgical conversion: 0%

The topic of this month is called ENDOLEAKS-CASE-BASED SOLUTIONS. More information to the discussants of the session about endoleaks. Thursday, January 30, 2020 in Leipzig, during the LINC symposium. Yes, please do not hesitate to answer the questions and to inform the experts about your current or recent cases of all type of endoleaks.

Your participation will provide unique data for an interesting discussion and will challenge the experts during the session.
Male, 67 y

Initially 52 mm AAA, treated at OSH

DUS control at 12 mo: 60 mm

Tri-Phase CTA: 60 mm from type IIb EL (IMA)
6 months later:

CEUS:
Maximum diameter 64 mm, type II EL

Trip-Phase CTA:
Type IIa EL from L3 lumbar
Conclusions

- Type II endoleaks are a major determinant of reinterventions of endovascular aortic aneurysm repair
- Most type II endoleaks do not necessitate treatment
- When aneurysm sac increases, make sure it really is a type II endoleak
- Treatment strategy and material is mainly dependent on anatomic criteria and interventionalist expertise
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