

# TRANSARTERIAL EMBOLISATION OF ENDOLEAKS

Carla van Rijswijk  
Interventional Radiologist  
LUMC Leiden, the Netherlands



# Disclosure

No conflicts of interest

# Type 2 endoleak

- Incidence 10-40%
- Prevalence decreases during follow-up

Prevalence and risk factors of type 2 endoleaks after endovascular aneurysm repair: a meta-analysis  
Guo et al. 2017; PLOS one: Febr 9

- Aneurysm rupture following isolated T2 endoleak <1%
- Increase aneurysm sac diameter of  $\geq 5$  mm

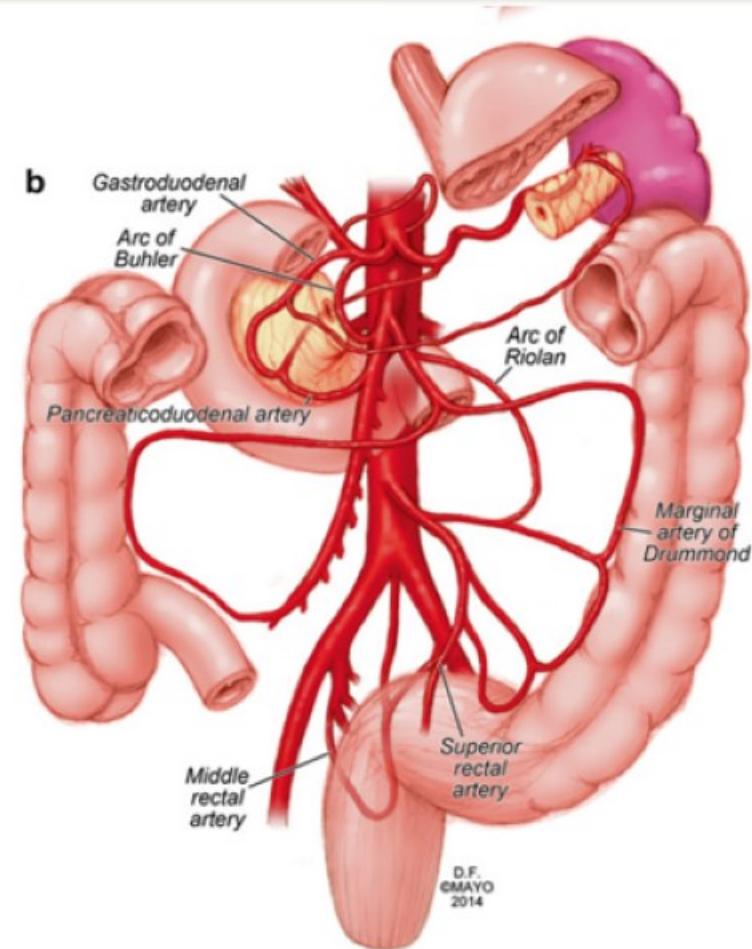
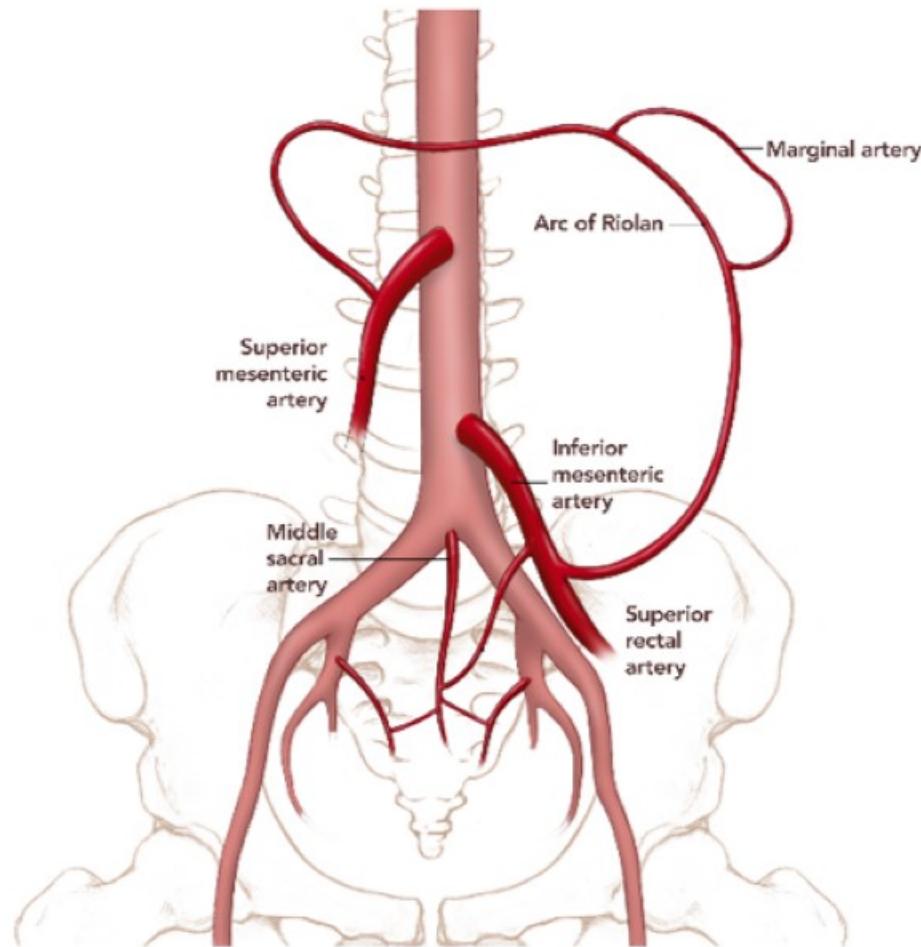
Avgerinos et al. 2014; J Vasc Surg 60:1386-139  
Clinical practice guidelines of the European Society for Vascular Surgery  
Jan 2018; JVS vol. 67

# Treatment options for endoleak type 2

- Transarterial embolisation
- Translumbar embolisation
- Transcaval embolisation
- Para-endograft embolisation
- Trans-endograft embolisation
- Laparoscopic ligation



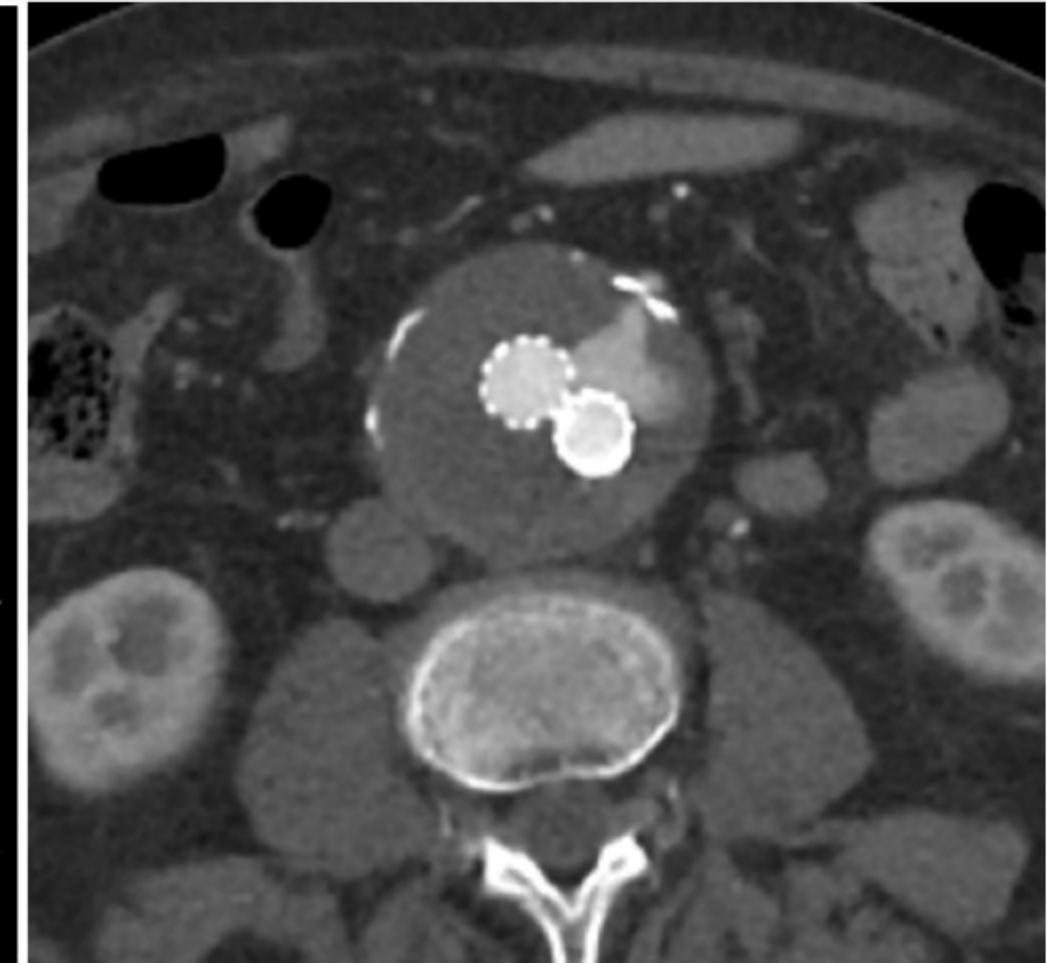
# Transarterial embolisation IMA endoleak



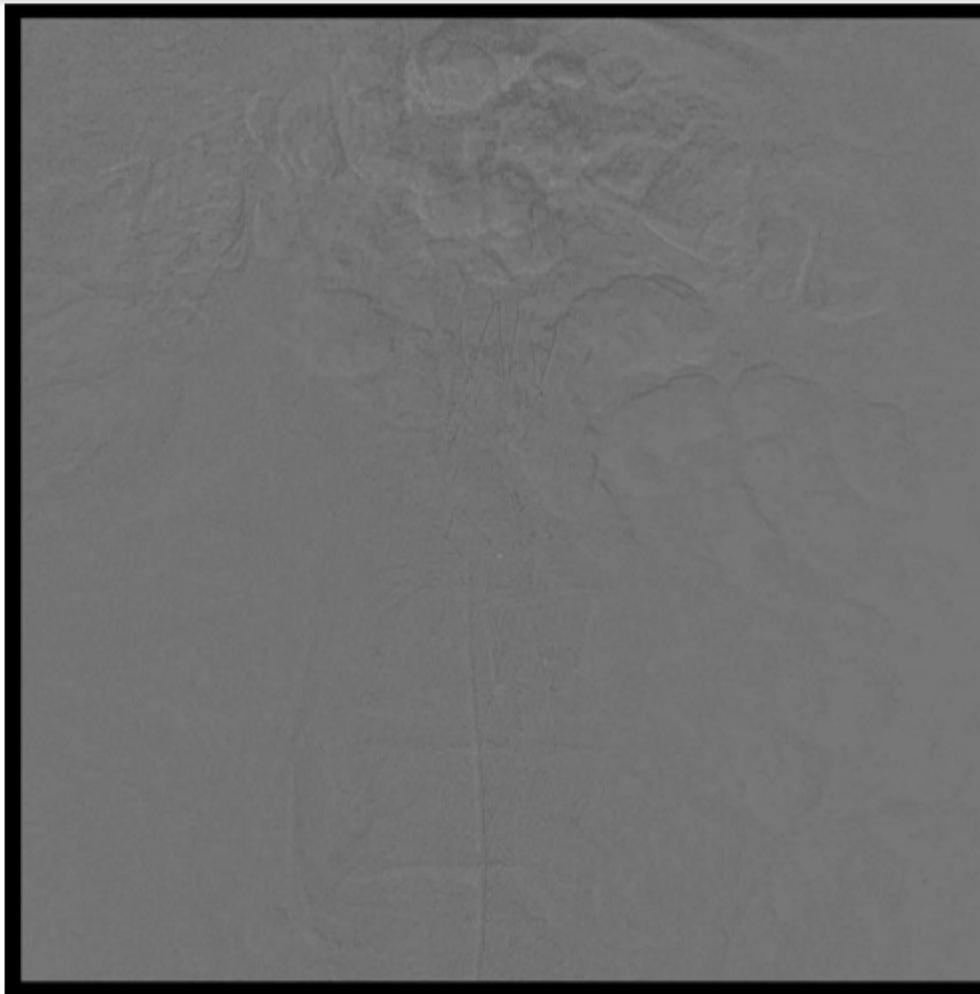
## Case

- 76 y-old male with infrarenal aneurysm treated with EVAR (Medtronic)
- Type 2 endoleak from patent IMA with increase of aneurysm sac diameter (5.5 cm to 6.5 cm)

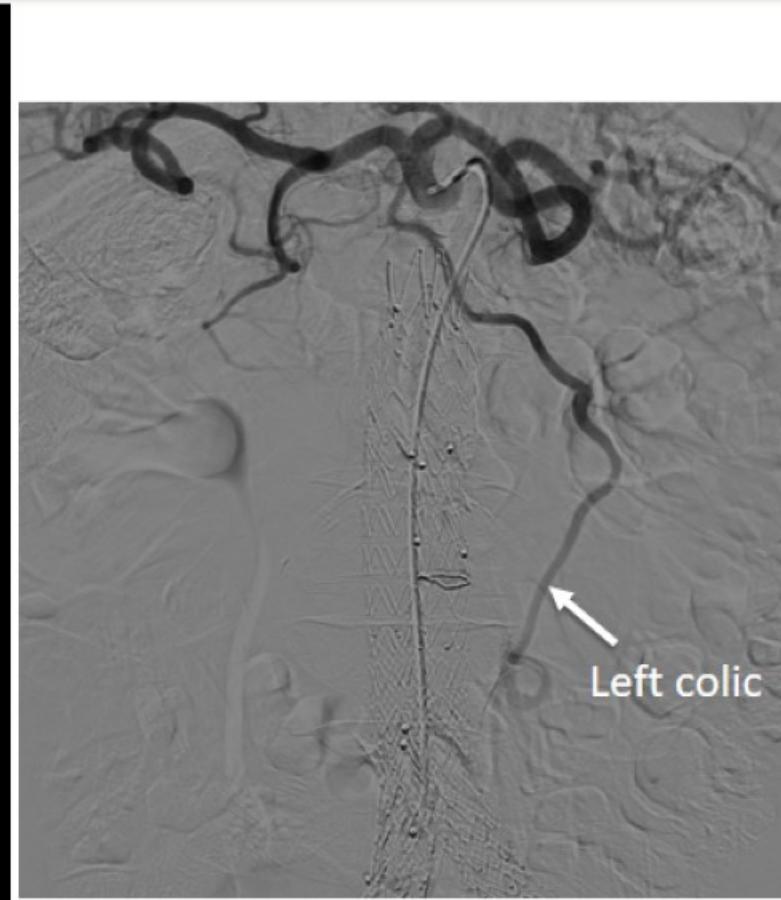
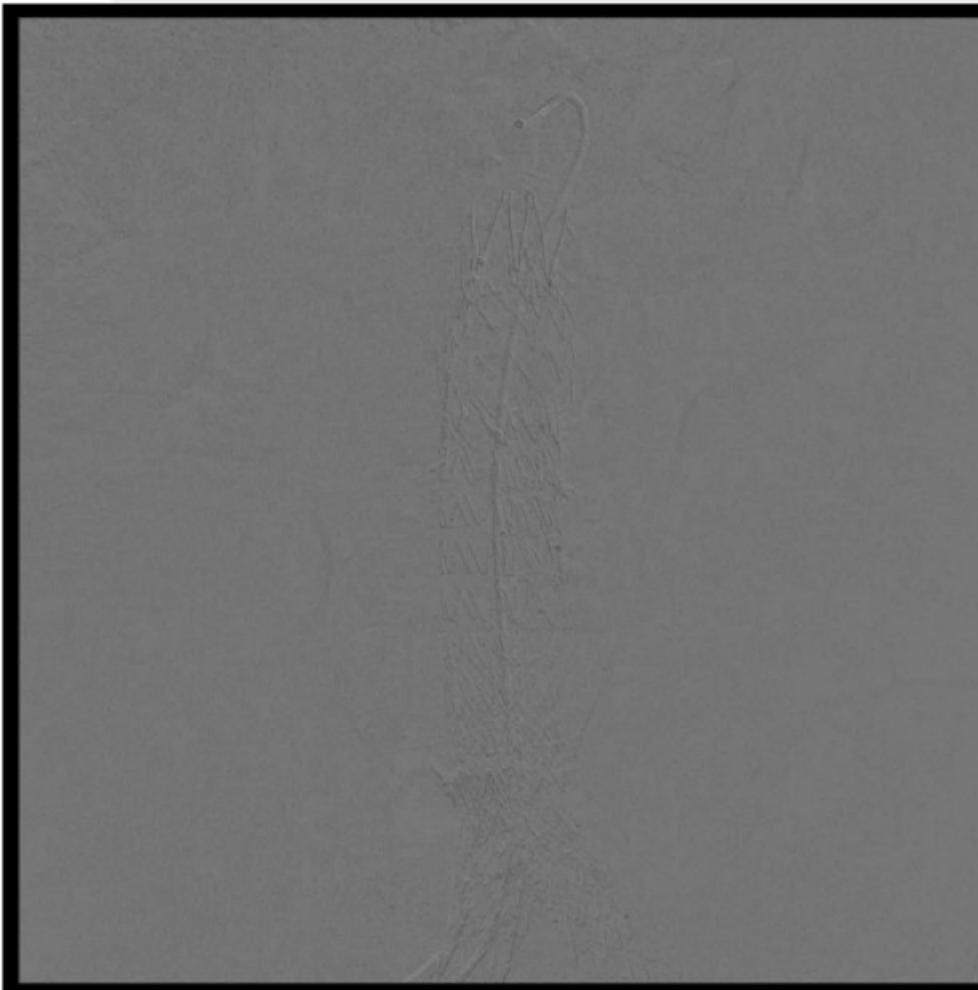
# Pre-embolisation CTA examination



# Selective angiography SMA



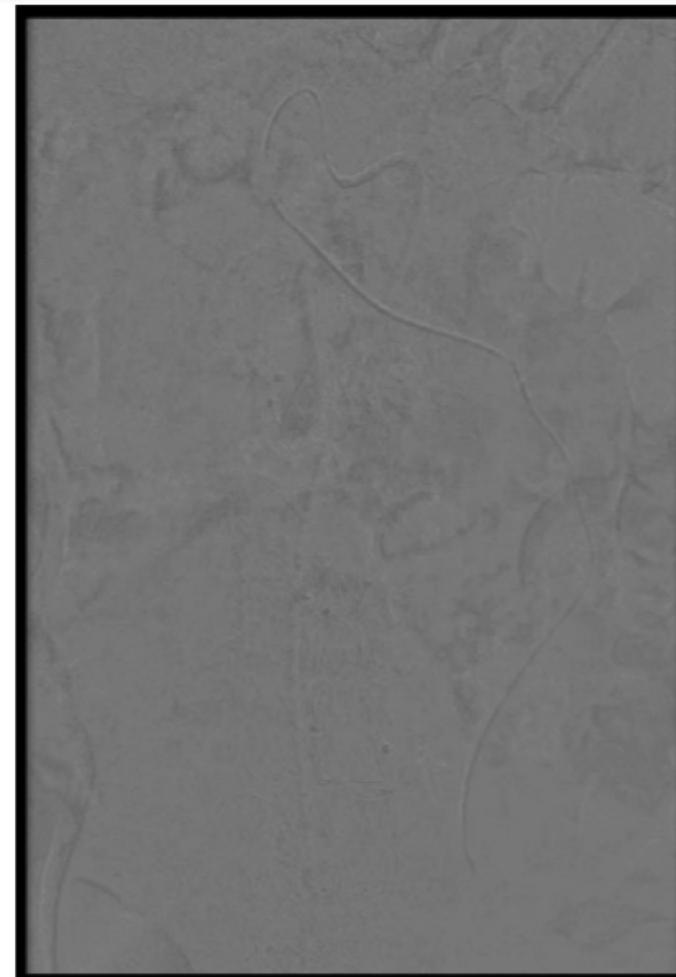
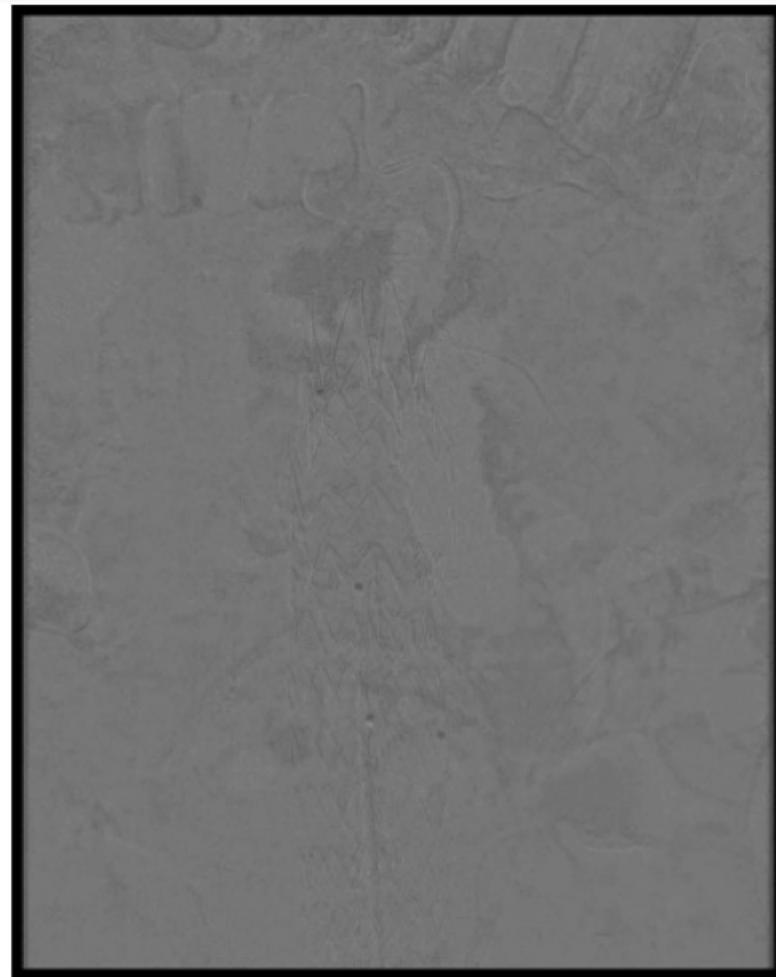
# Selective angiography Celiac Trunk



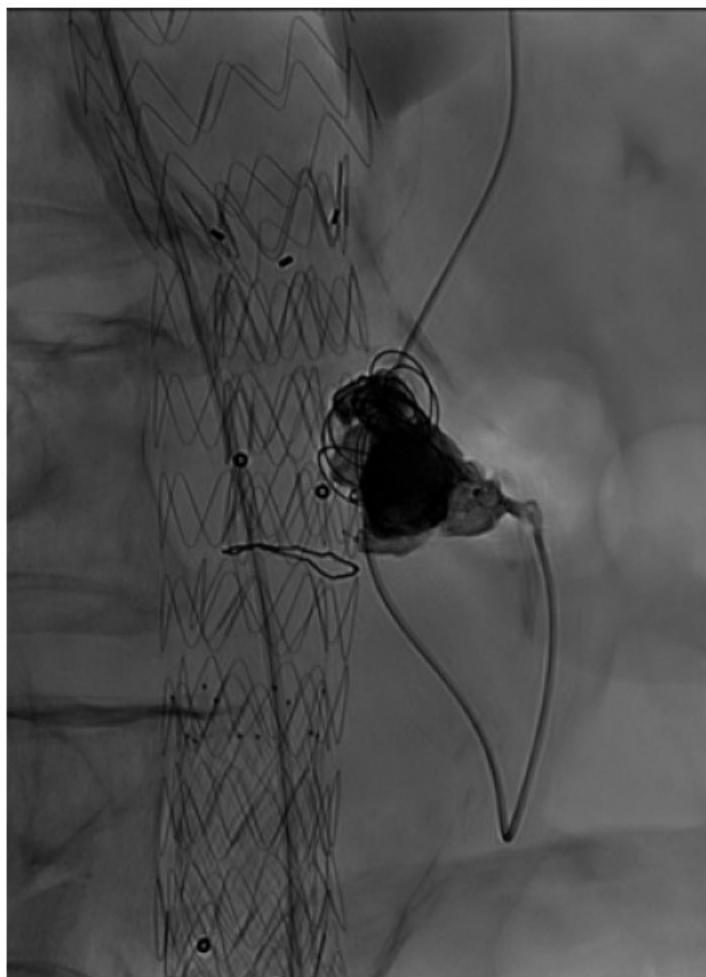
# Selective IMA katheterisation

5 fr Celiac or Cobra catheter

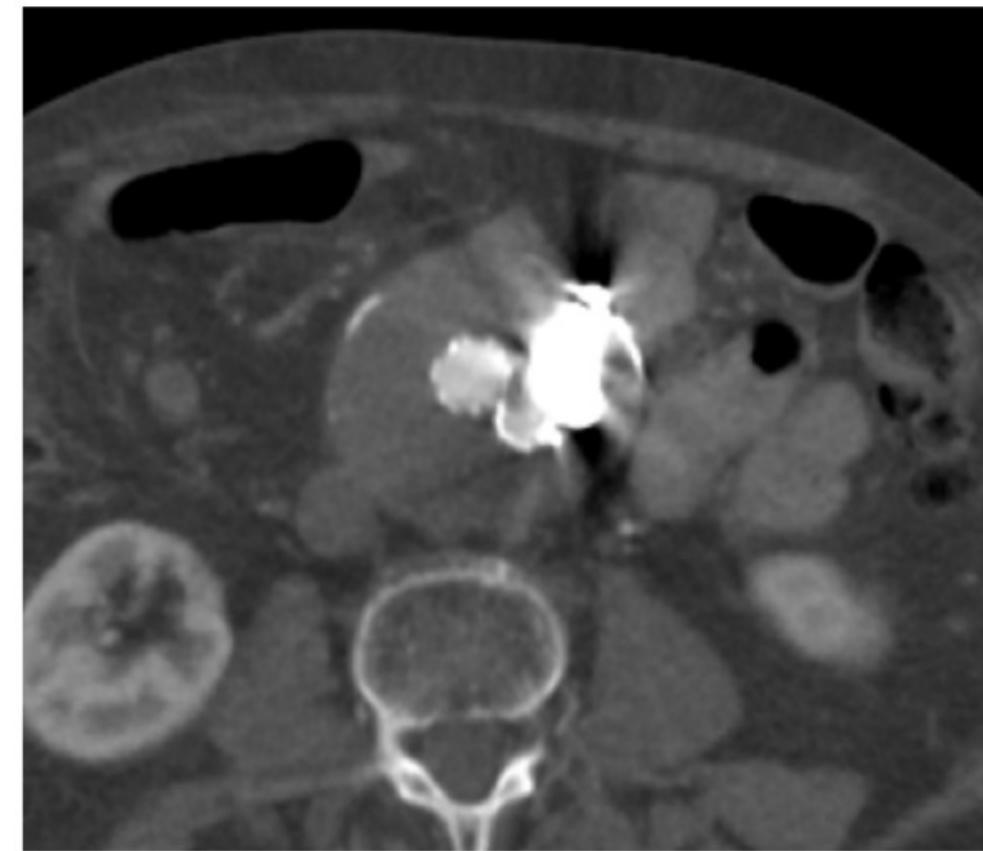
2.7 fr Progreat microcatheter



# Onyx embolisation

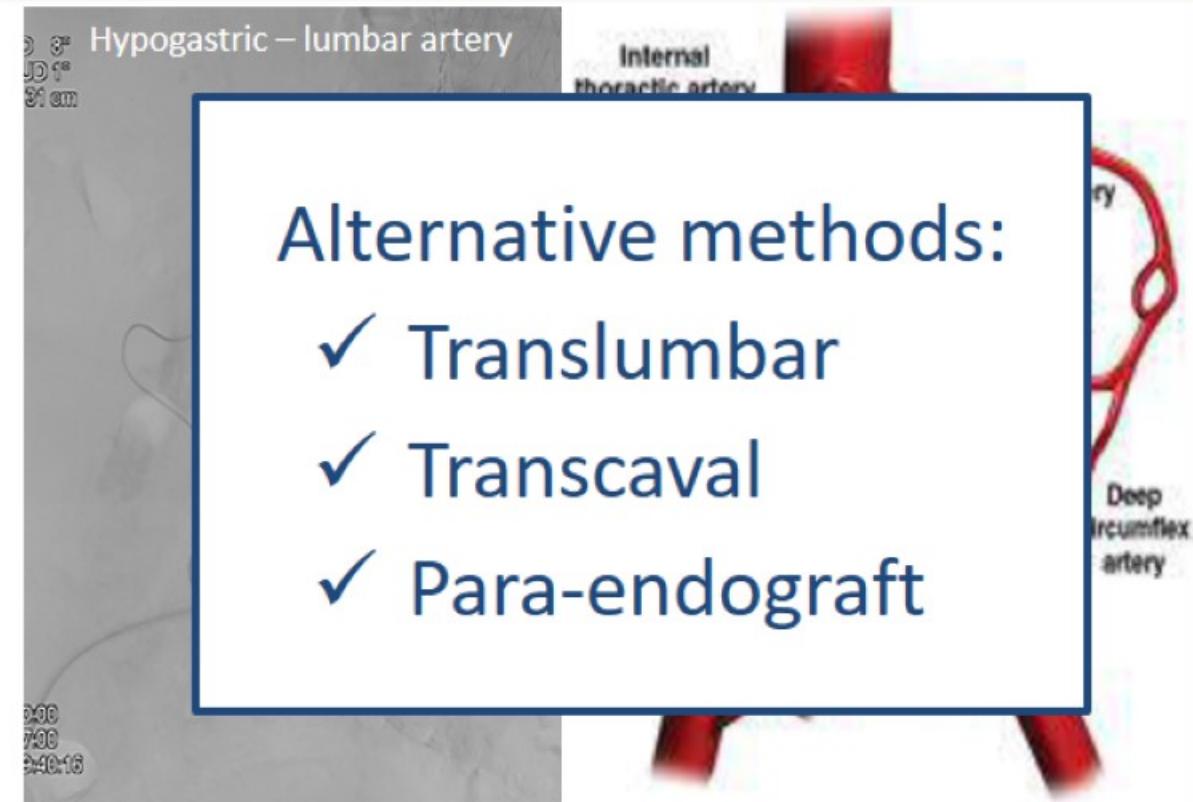


# Post embolisation CTA examination



# Transarterial LA embolisation

- Technical challenging
- Time consuming
- Reintervention rate 20%
- Recurrence rate 40%



Sarac et al. 2012; JVS 55:33-40

Abularage et al. 2012; JVS 56:630-6

Hongo et al. 2014; J Vasc Intervent Radiol 25:709-16