

# Extreme IO Case

**Ziv J Haskal, MD**

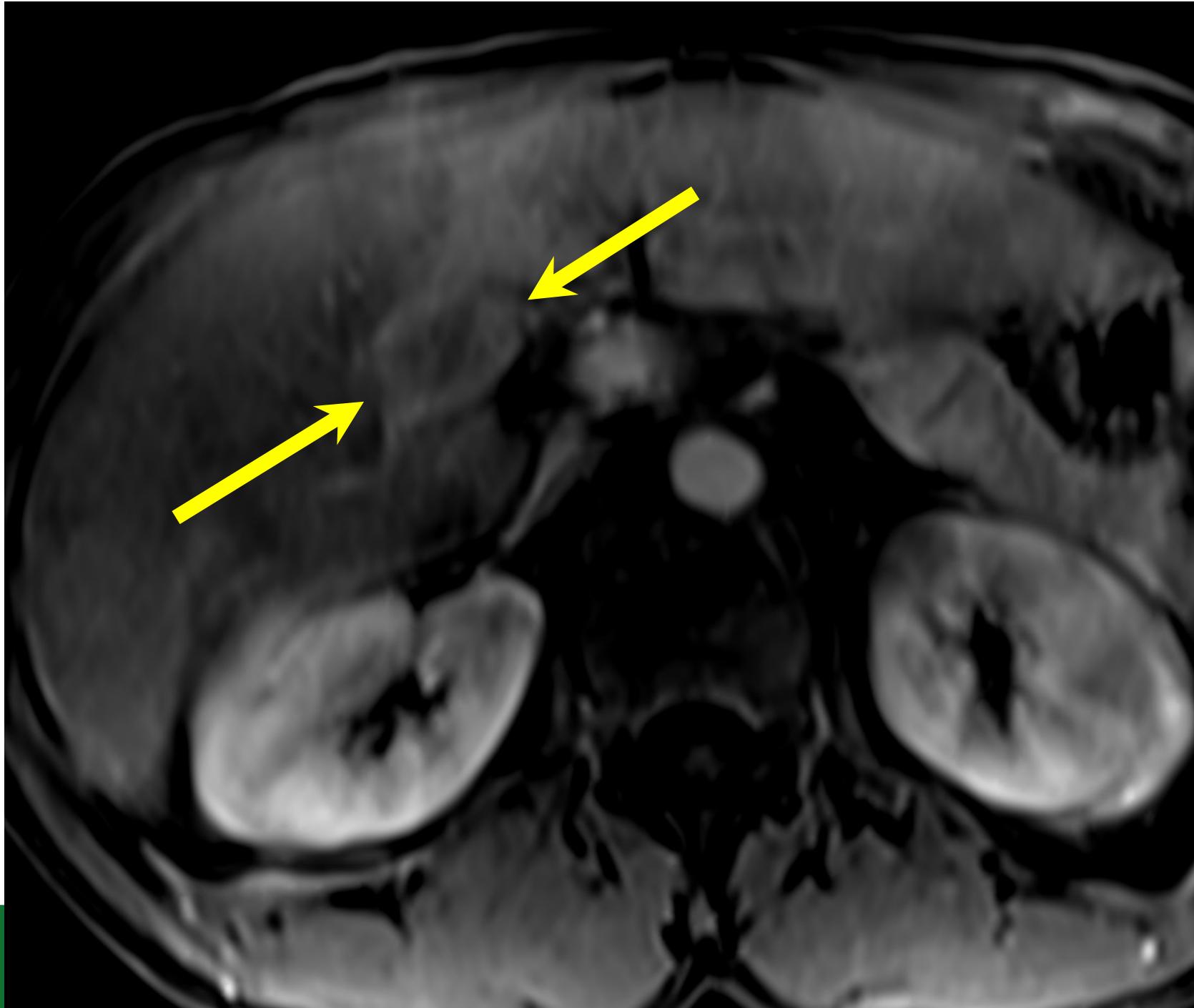
**Dylan Suttle, MD**

University of Virginia

# Disclosures

- Boston Scientific, SIRTEX, WL Gore, Becton Dickinson, BlackSwan Vascular

Brand names are included in this presentation for participant clarification purposes only. No product promotion should be inferred.

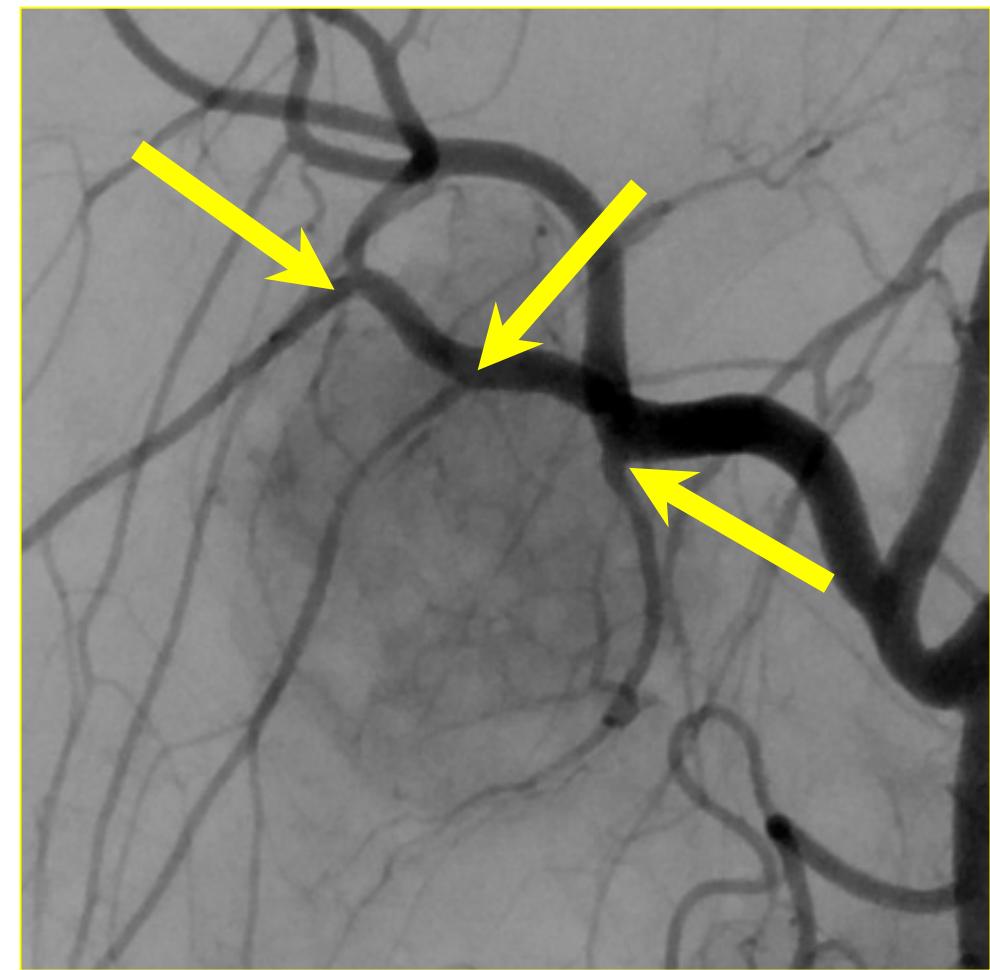
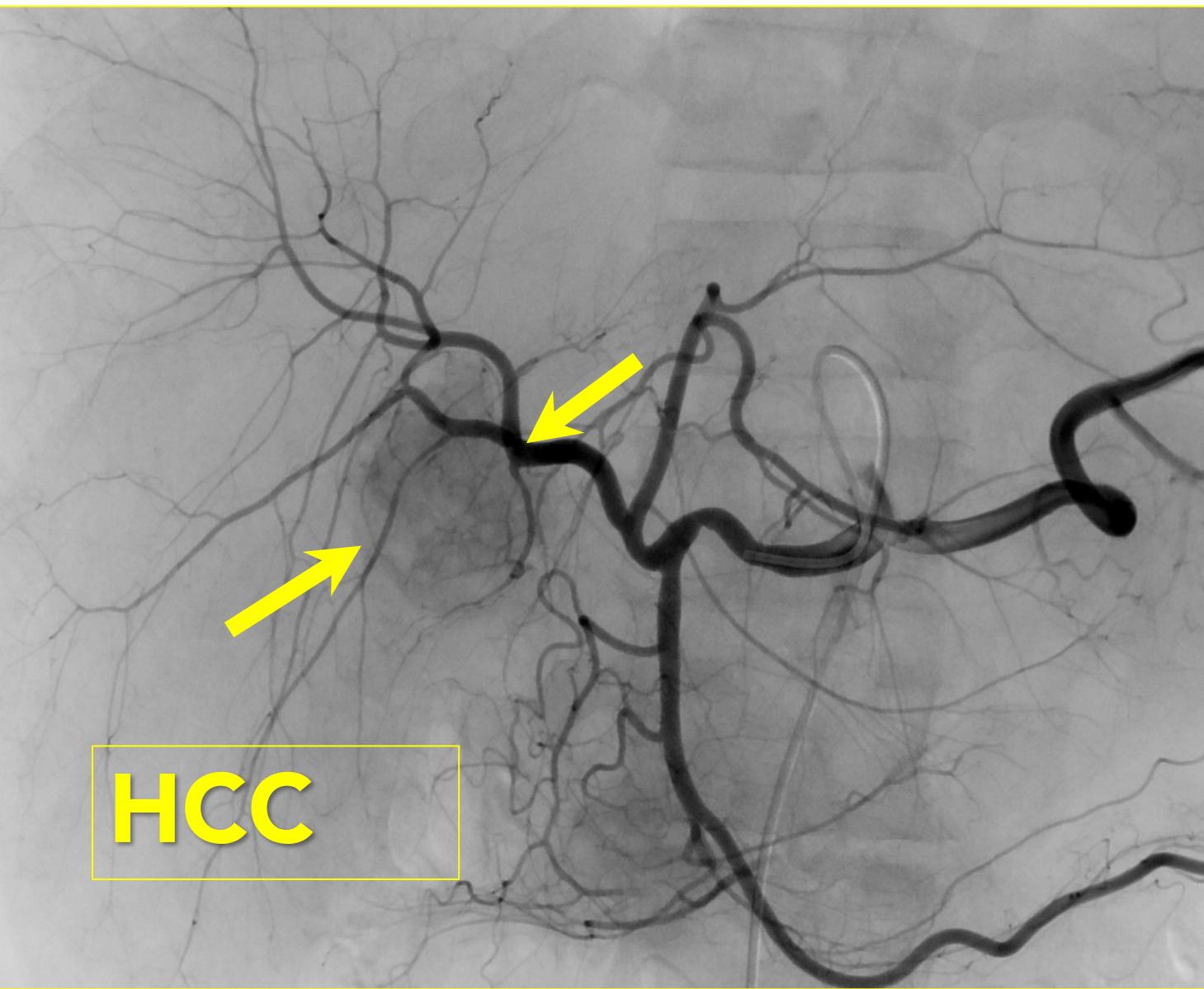


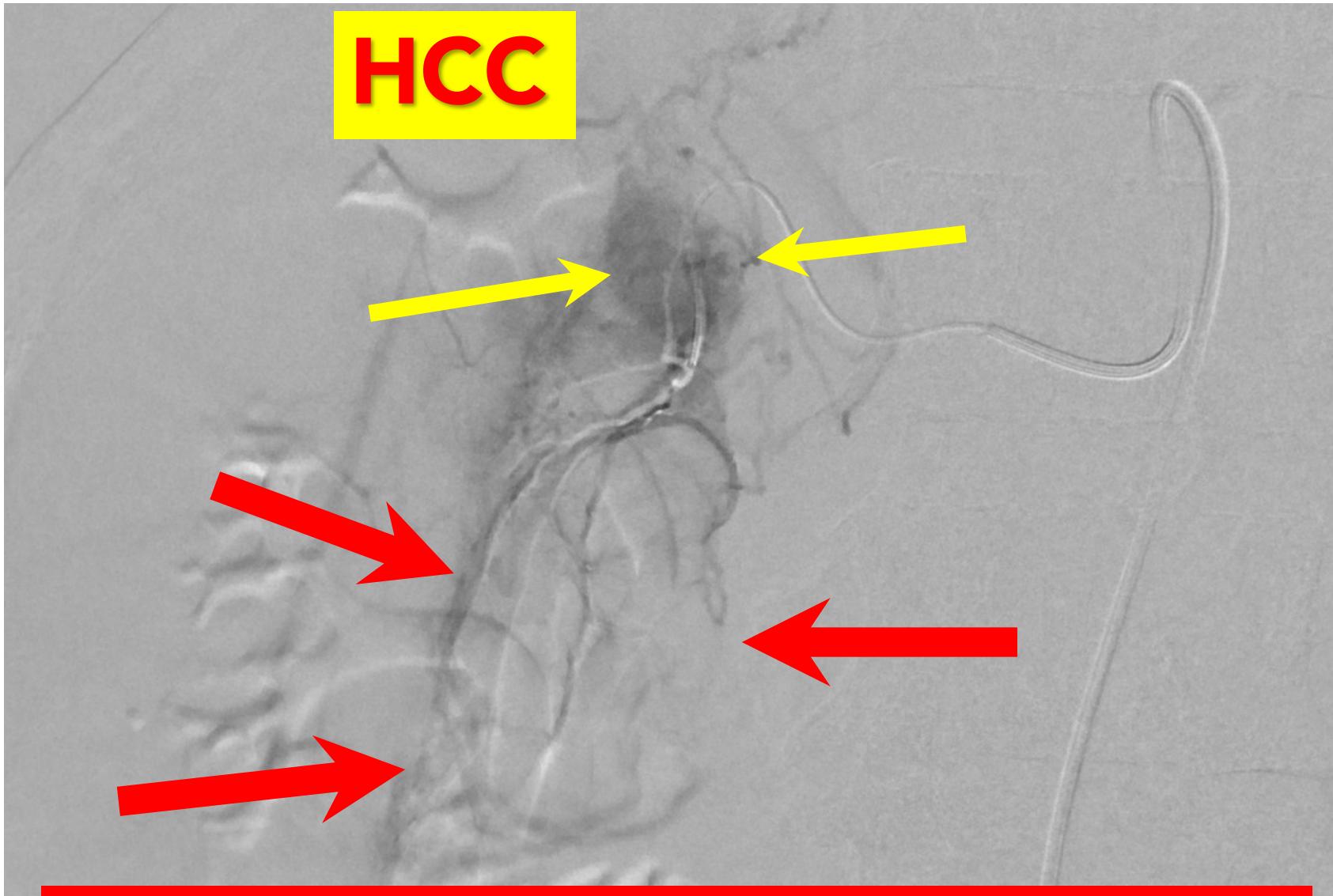
57 male  
HCV cirrhosis

3 cm HCC

MELD 11  
Childs Pugh B  
A-FP 36

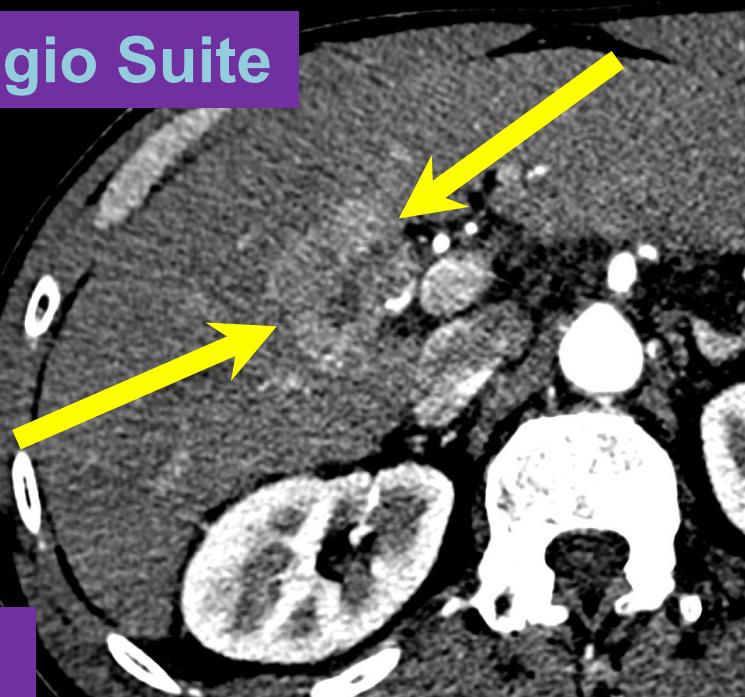
Planned TACE



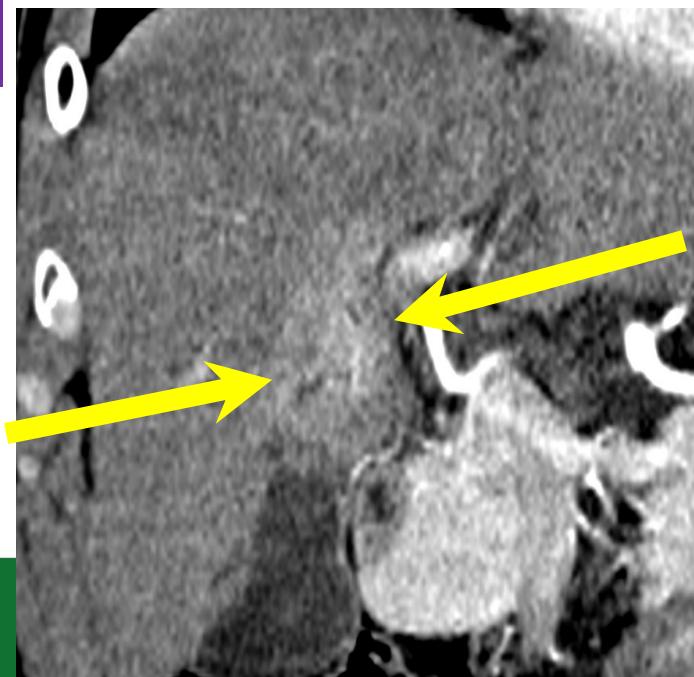


**Cystic Artery/Gallbladder**  
CIO

## Hybrid CT/Angio Suite

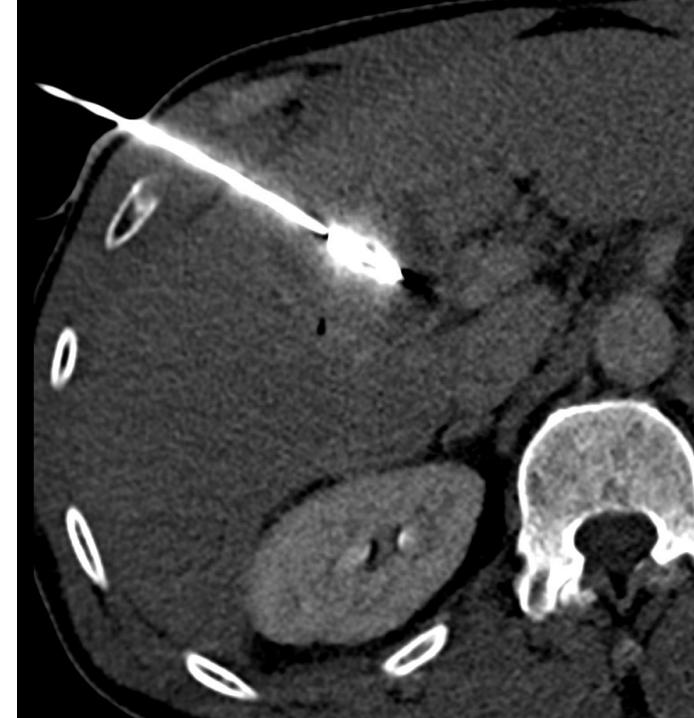


Pre-Ablation  
CT



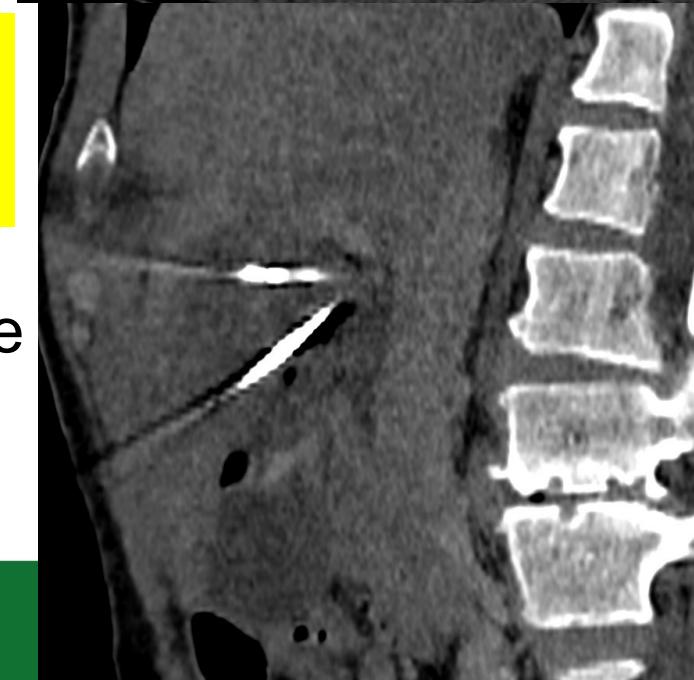
Microwave

**65 Watts, 9 mins**



**Post-Ablation  
CT**

2 MWA antennae



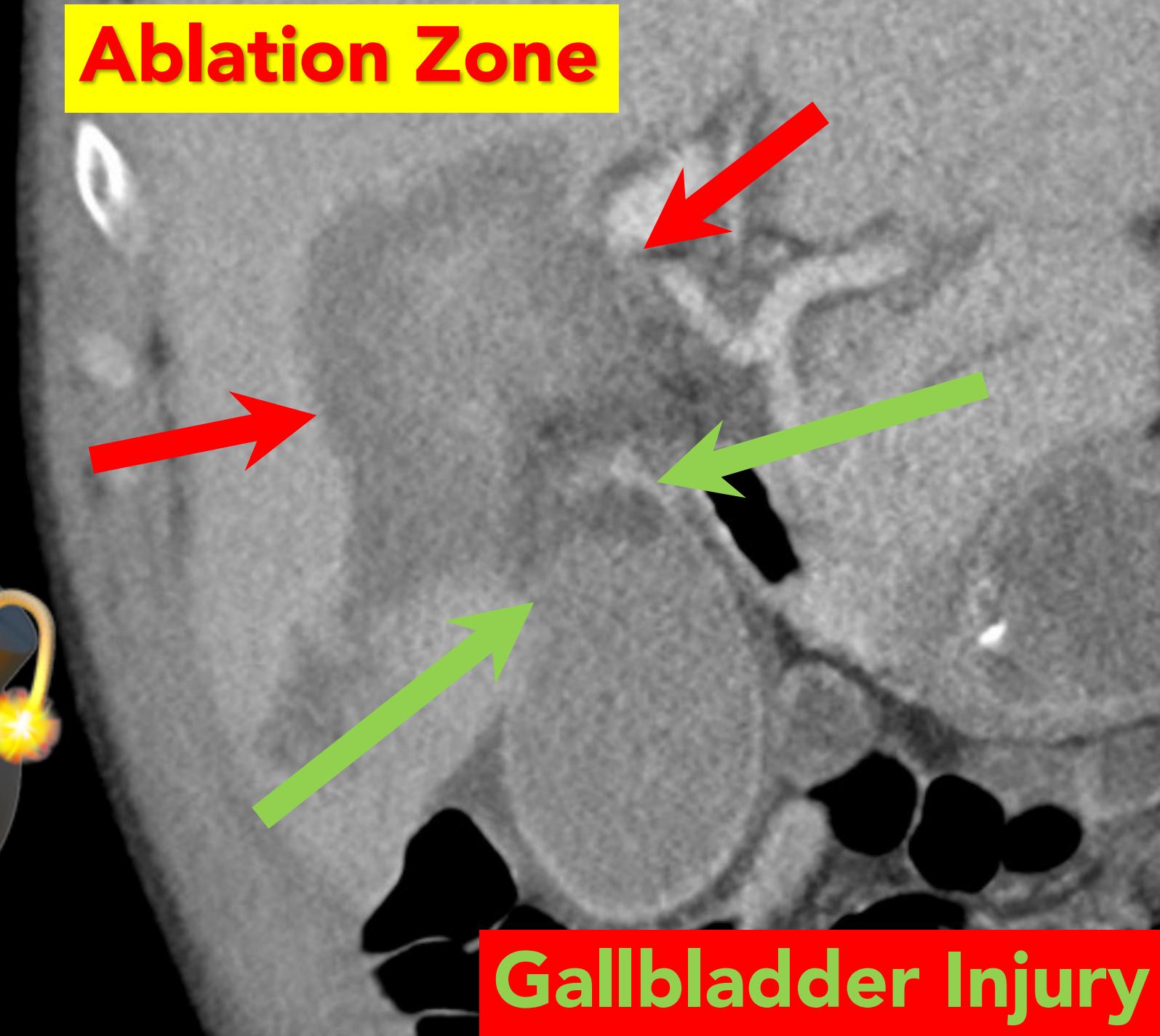
Day #3

- fever
- leukocytosis
- vomiting
- ↑LFTs



cio

**Ablation Zone**



**Gallbladder Injury**

# Chronology

## Day #3

-fever  
-leukocytosis  
-vomiting  
-↑LFTs  
  
-Antibiotics  
-Perc chole

## Day #5

-improved  
-discharged  
home with  
continued  
antibiotics

## 1, 2, and 3 months

-chole check/changes  
-external GB drainage  
output change  
**bilious → serous**

## 4 months

-check/change  
-fistula seen into  
ablation cavity

# Ablation Cavity

**SURGERY**



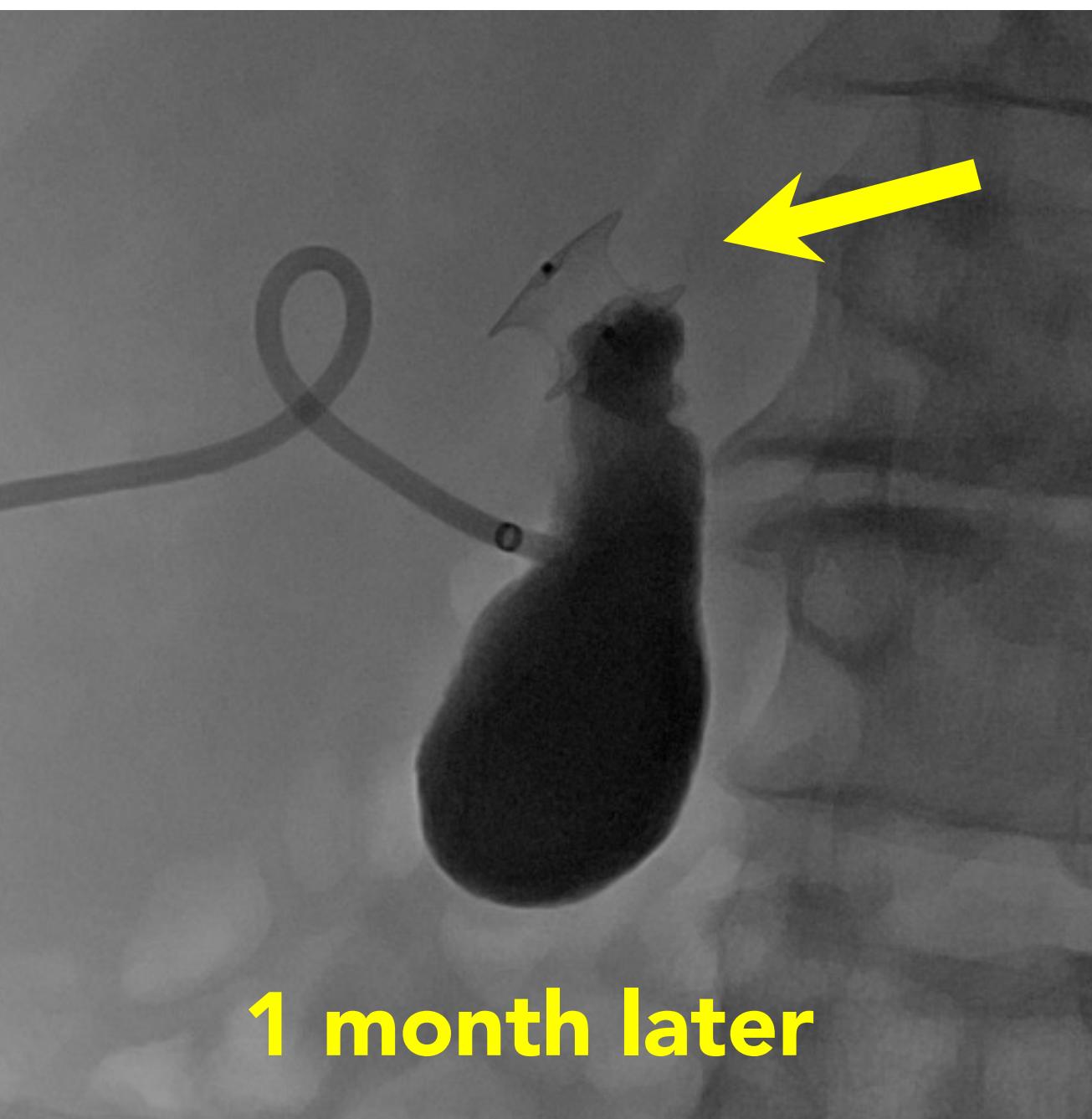
**No Cystic Duct**

**cio**

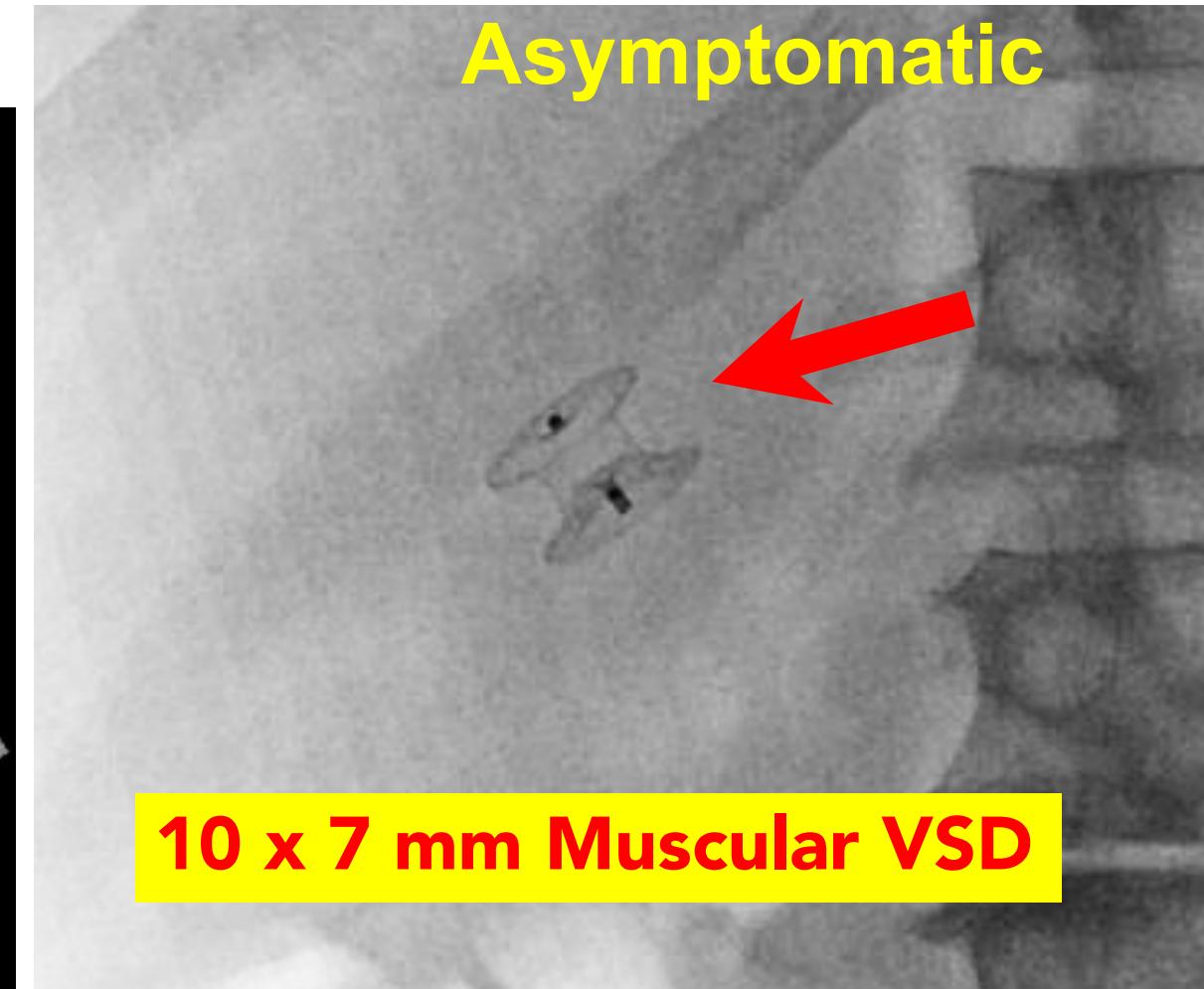
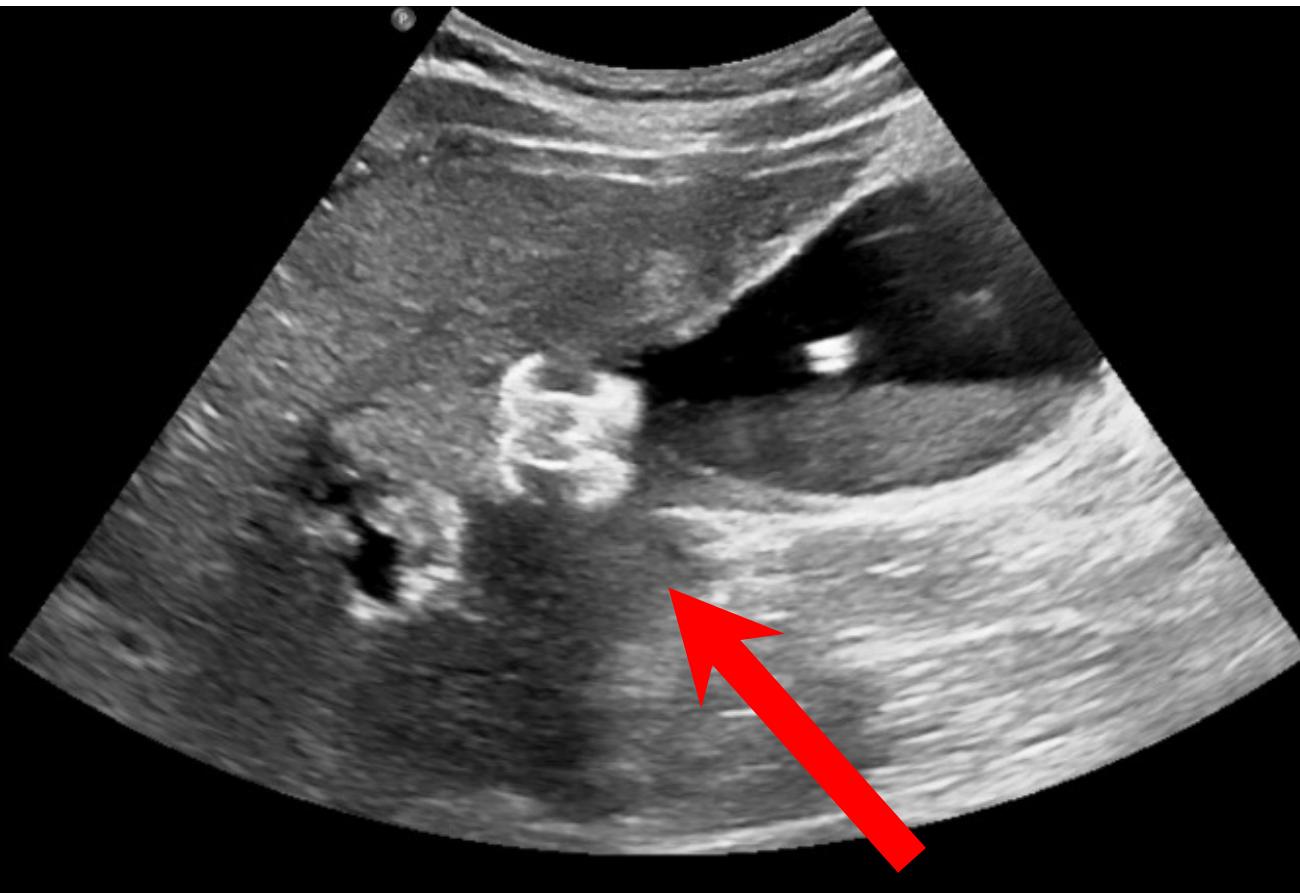




IF THE SHOE  
FITS...

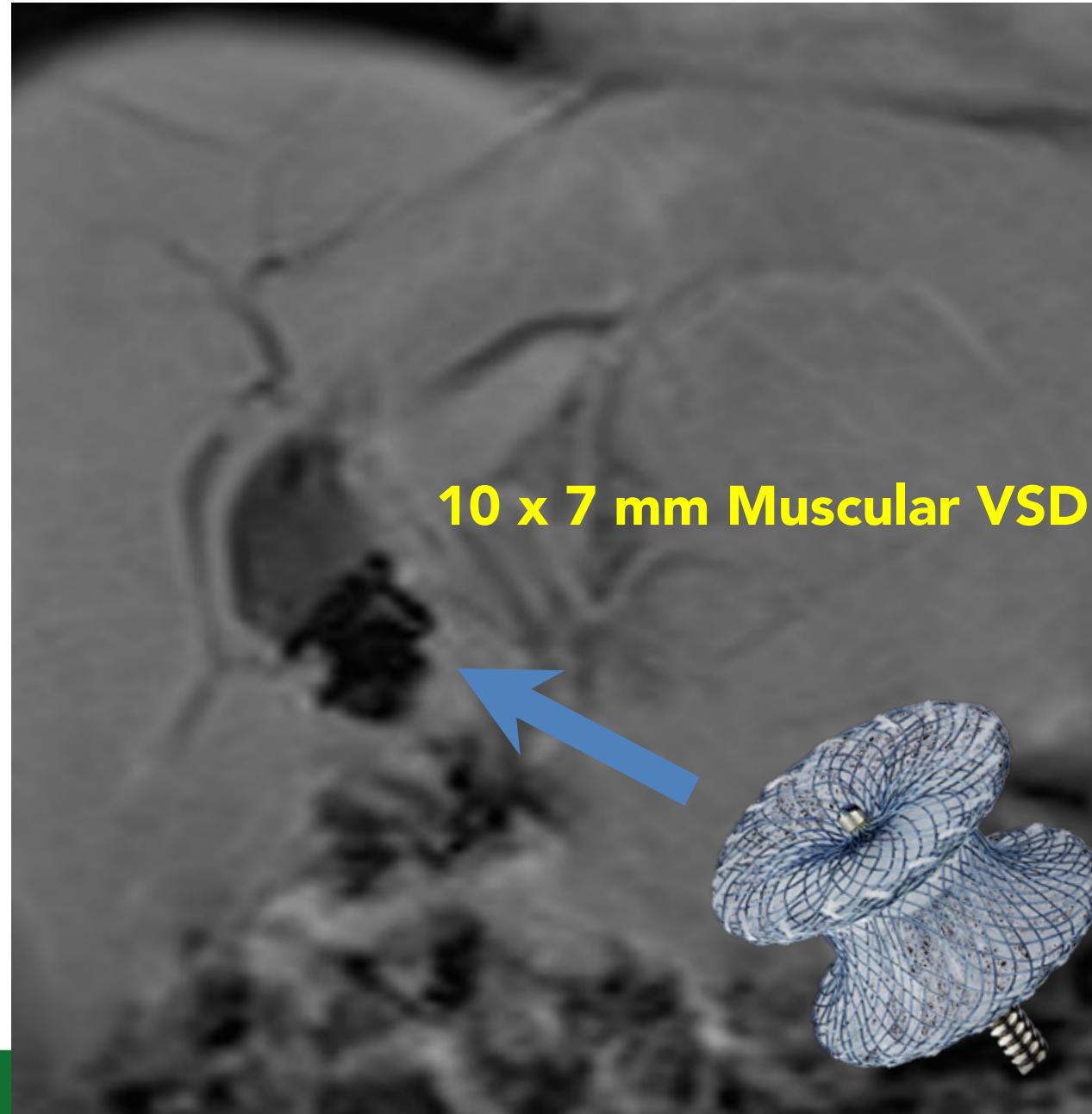


# Tube Capped, then Removed; 2 Months Later



# 12-Month Follow-Up

- Asymptomatic
- LIRADS TR-nonviable
- aFP 36→9



# Conclusions / Comments

- Unpredictability of thermal ablation zones
- Safe Juxta-GB ablation has been described, esp cryo
- Extraordinary 1<sup>st</sup> use of a cardiologic device for non-vascular IR application
- .....?