

# STS/EACTS Latin America Cardiovascular Surgery Conference

November 15-17, 2018

Hilton Cartagena | Cartagena, Colombia



## Minimally Invasive MV Surgery with Biatrial Maze Operation

Steven Hunter  
Sheffield Teaching Hospitals,  
UK



# Declarations

- Consult and Proctor for:
  - Atricure
  - SJM/Abbott

# Concomitant Surgical Ablation

## 2017 Society of Thoracic Surgeons (STS) Guidelines Summary

Ann Thorac Surg 2017;103:329–41.

### The Society of Thoracic Surgeons 2017 Clinical Practice Guidelines for the Surgical Treatment of Atrial Fibrillation<sup>1</sup>

Vinay Badhwar, MD, J. Scott Rankin, MD, Ralph J. Damiano, Jr., MD, A. Marc Gillinov, MD, Faisal G. Bakaeen, MD, James R. Edgerton, MD, Jonathan M. Philpott, MD, Patrick M. McCarthy, MD, Steven F. Bolling, MD, Harold G. Roberts, MD, Vinod H. Thourani, MD, Richard J. Shemin, MD, Scott Firestone, MS, Niv Ad, MD.

#### CLASS OF RECOMMENDATION – I

MVR

AVR

CABG

AVR + CABG

Heart Team

- Surgical ablation for AF can be performed without additional risk of operative mortality or major morbidity, and is **RECOMMENDED** at the time of **concomitant mitral operations** to restore sinus rhythm. (Class I, Level A)
- Surgical ablation for AF can be performed without additional operative risk of mortality or major morbidity, and is **RECOMMENDED** at the time of **concomitant isolated aortic valve replacement, isolated coronary artery bypass graft surgery, and aortic valve replacement plus coronary artery bypass graft operations** to restore sinus rhythm. (Class I, Level B nonrandomized)
- In the treatment of AF, **multidisciplinary heart team** assessment, treatment planning, and long-term follow-up can be **USEFUL AND BENEFICIAL** to optimize patient outcomes. (Class I, Level C expert opinion)

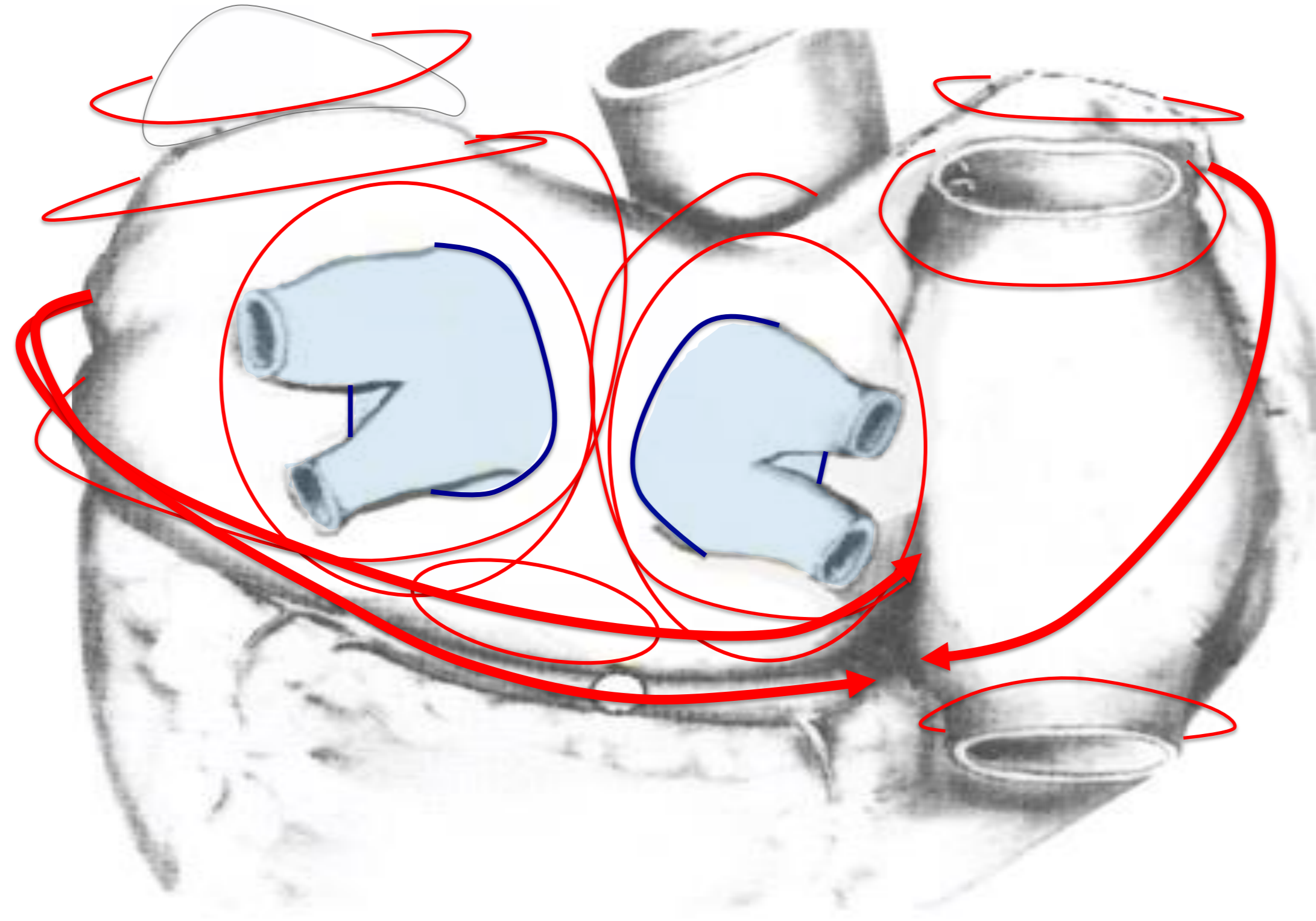
# The aim of Atrial ablation is to restore NSR

- The lesion set with the best and most consistent results is the Cox Maze IV
- Can this be achieved during MIS mitral valve surgery safely and efficaciously?
- Can any lesions be left out?
- Neither the mitral valve repair nor the long term result of the AF surgery should be compromised by MIS

# Drivers if AF



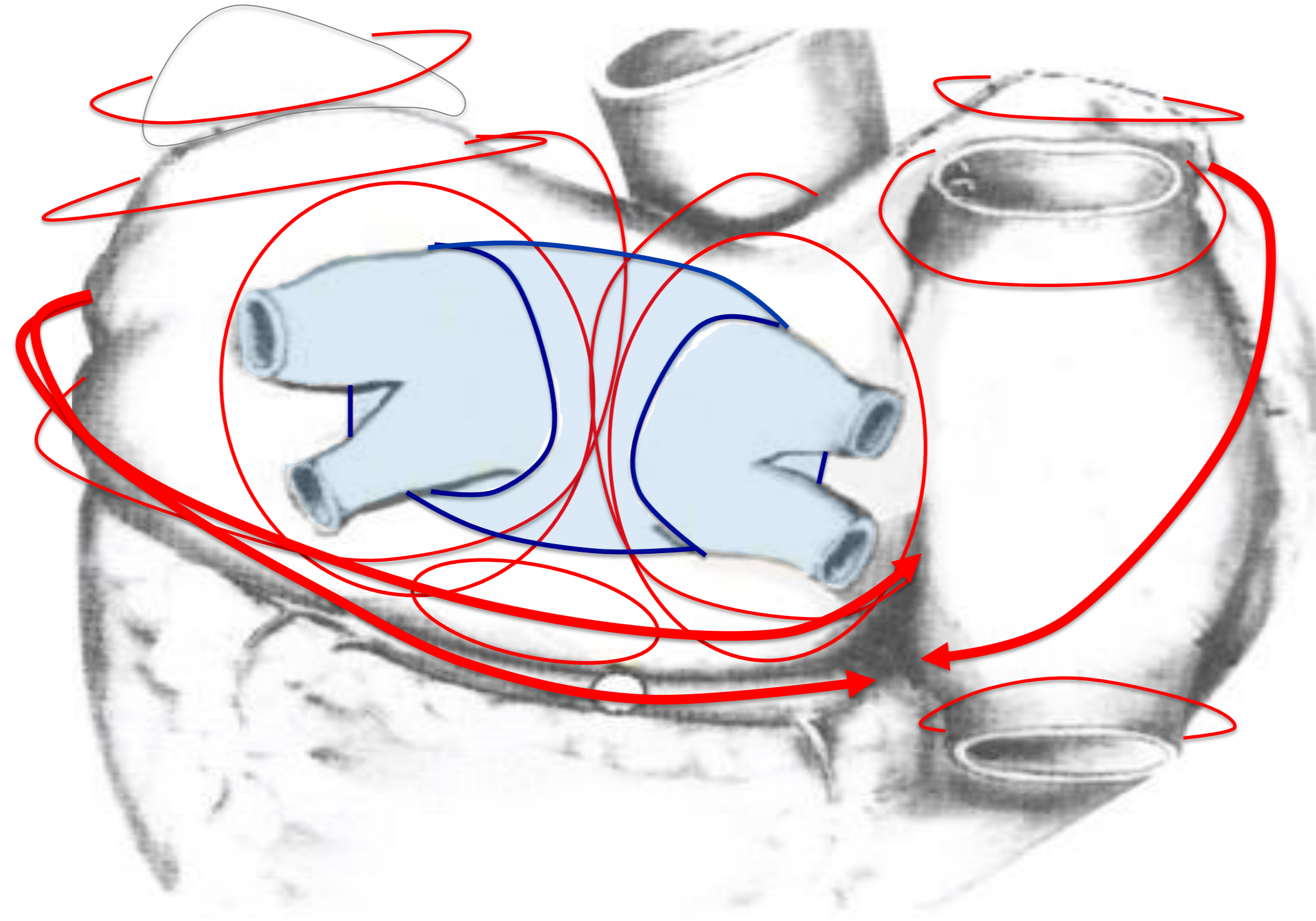
# PVI in Non-PAF



PVI  
Interrupts  
0% of Drivers

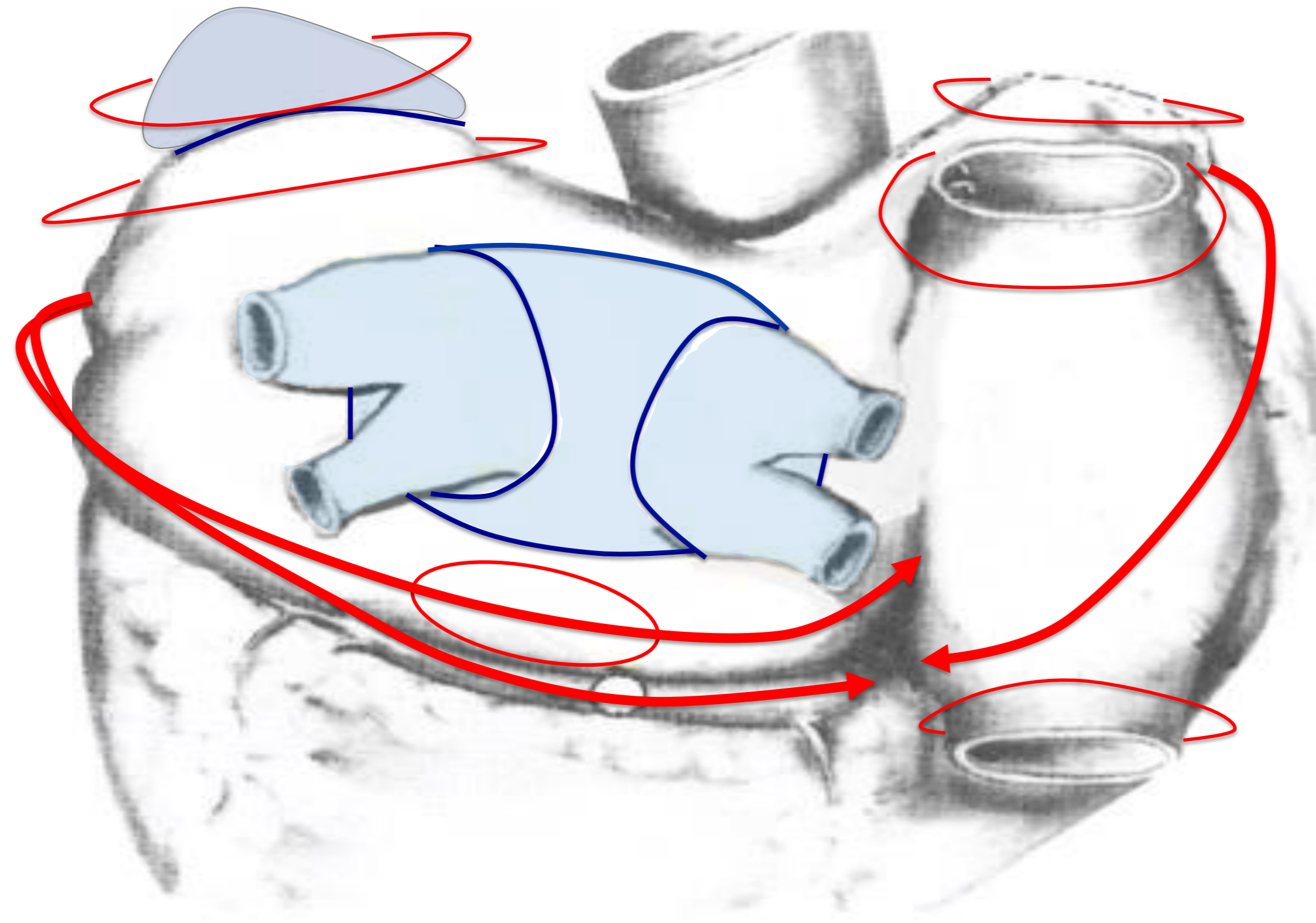


# Box-Lesion in Non-PAF



**Box Lesion**  
**Interrupts**  
**20-40% of Drivers**

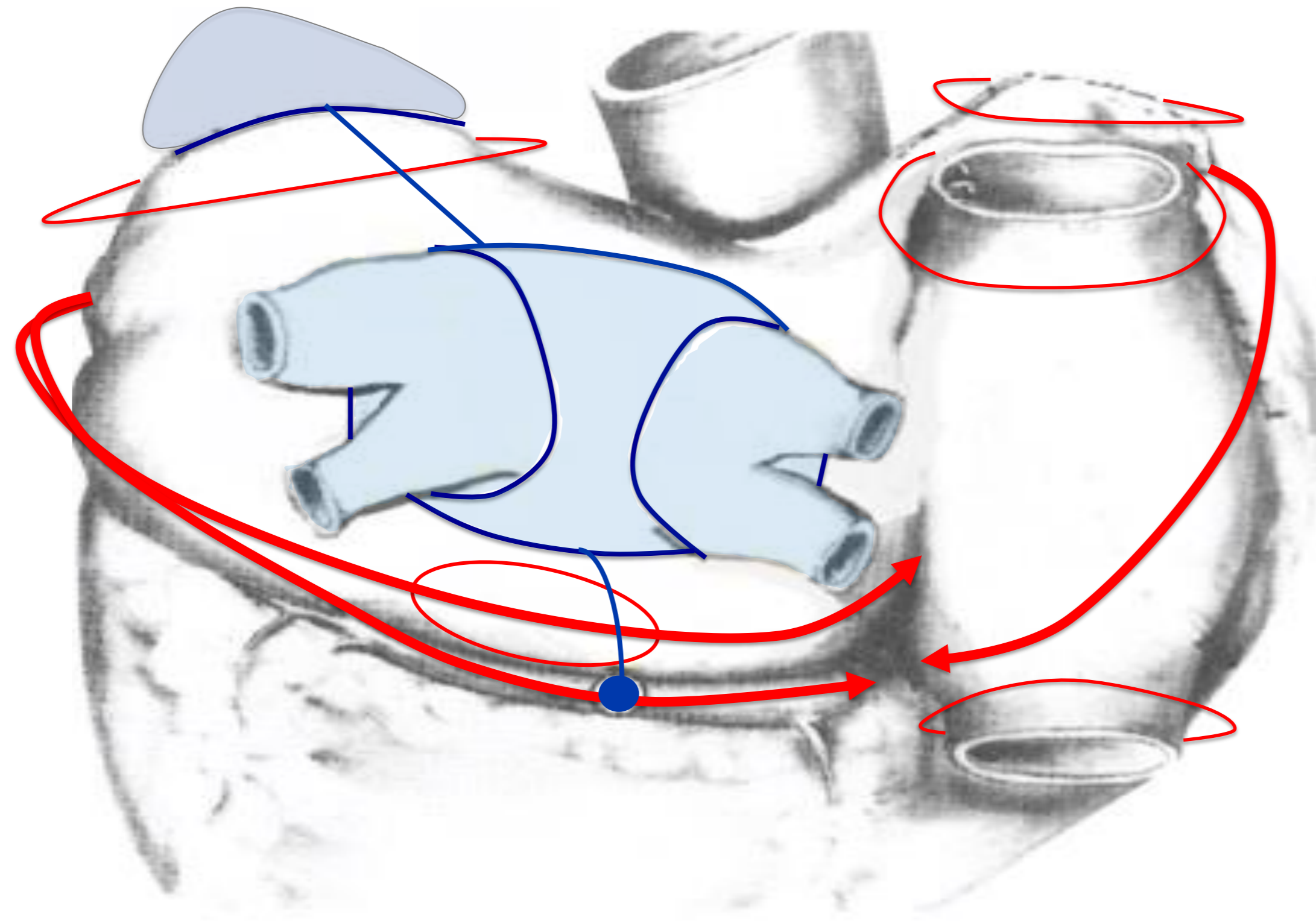
# Box-Lesion + LAA-Management



**Box Lesion +**  
**LAAO**  
**Isolates**  
**20-40% of Drivers**

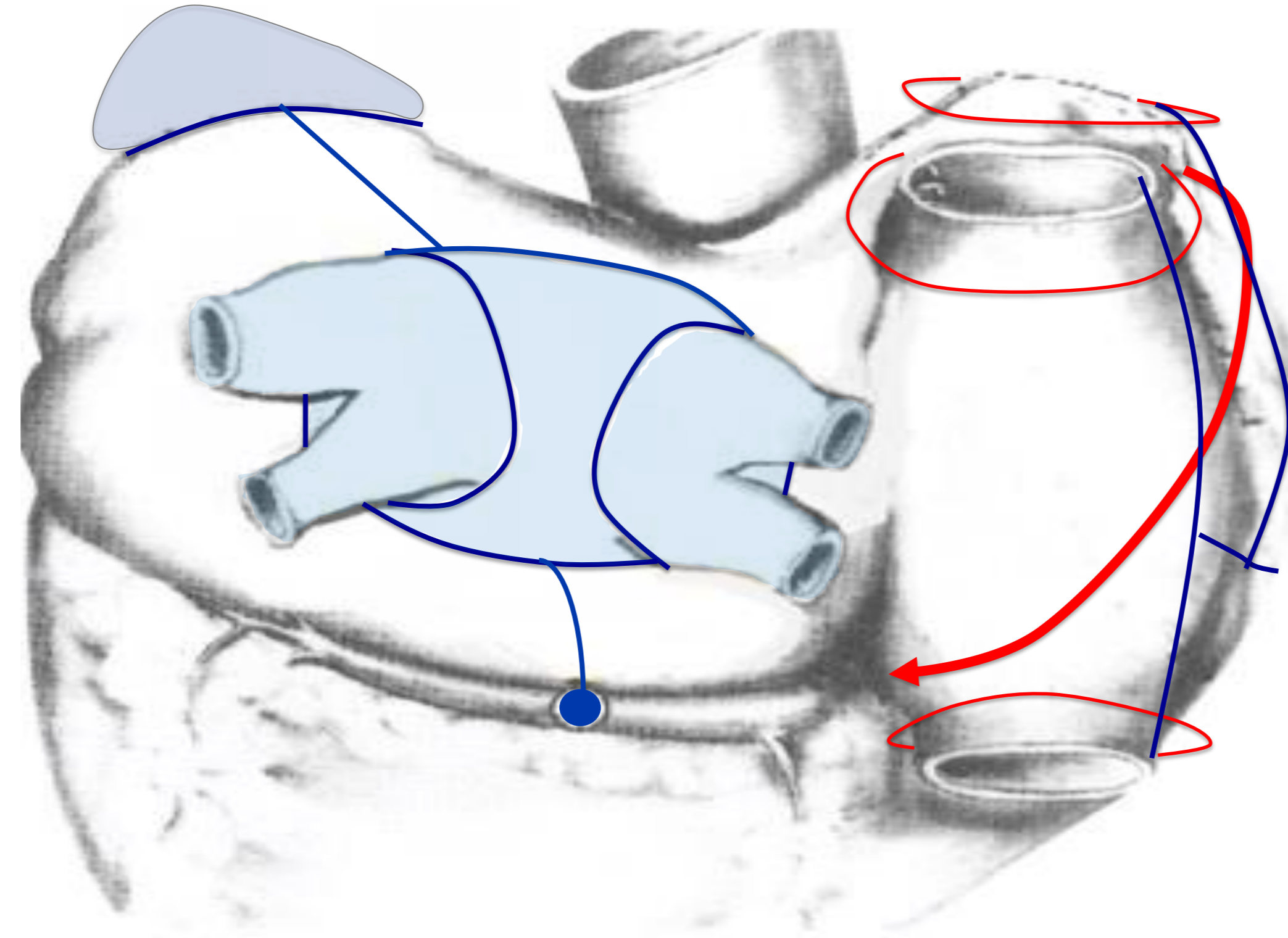


# Left-Atrial Maze



**LA Maze  
Isolates  
100% of LA Drivers  
(70% of Total)**

# Cox-Maze Procedure



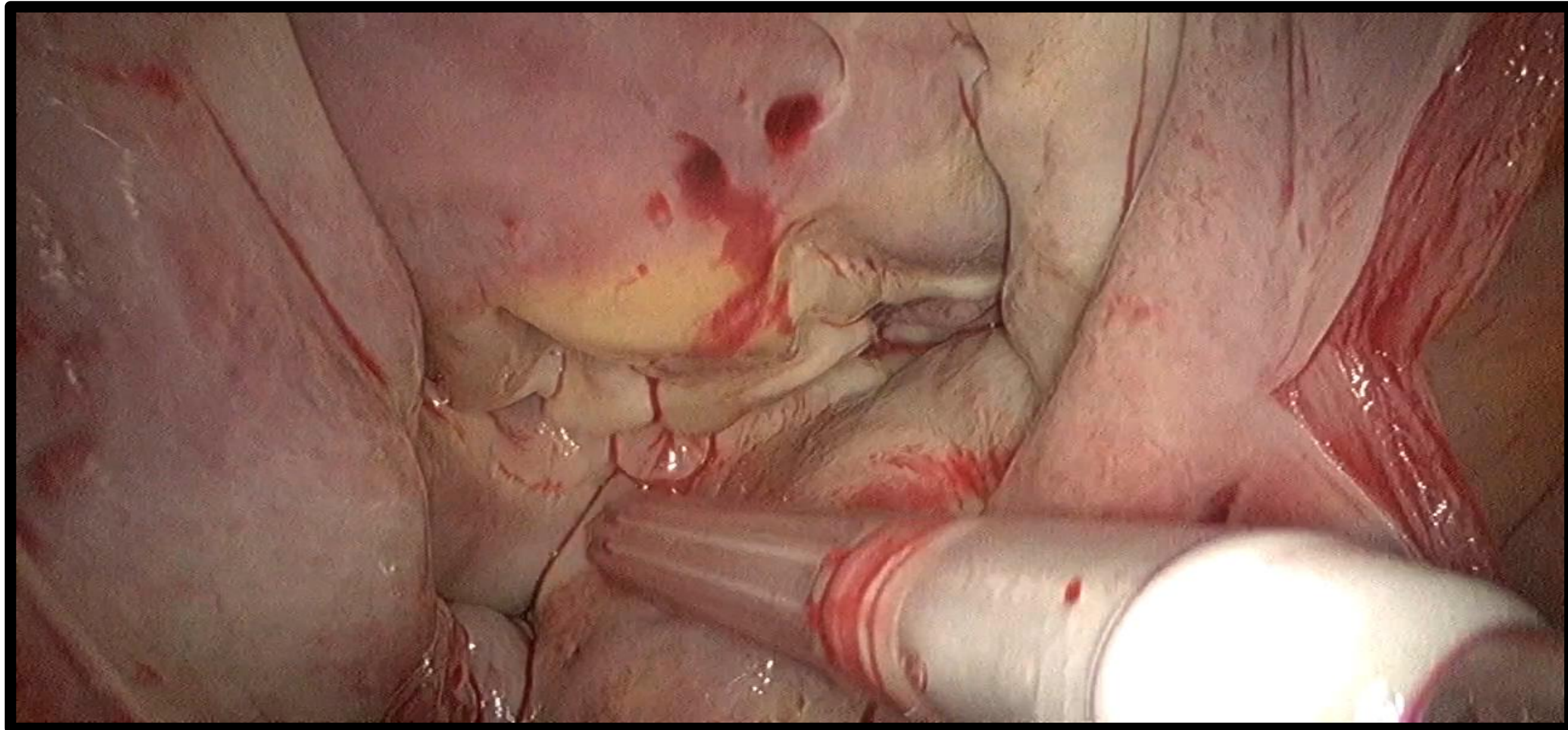
**Maze Procedure  
Interrupts  
100% of Drivers**



# Can any lesions be ignored at surgery?

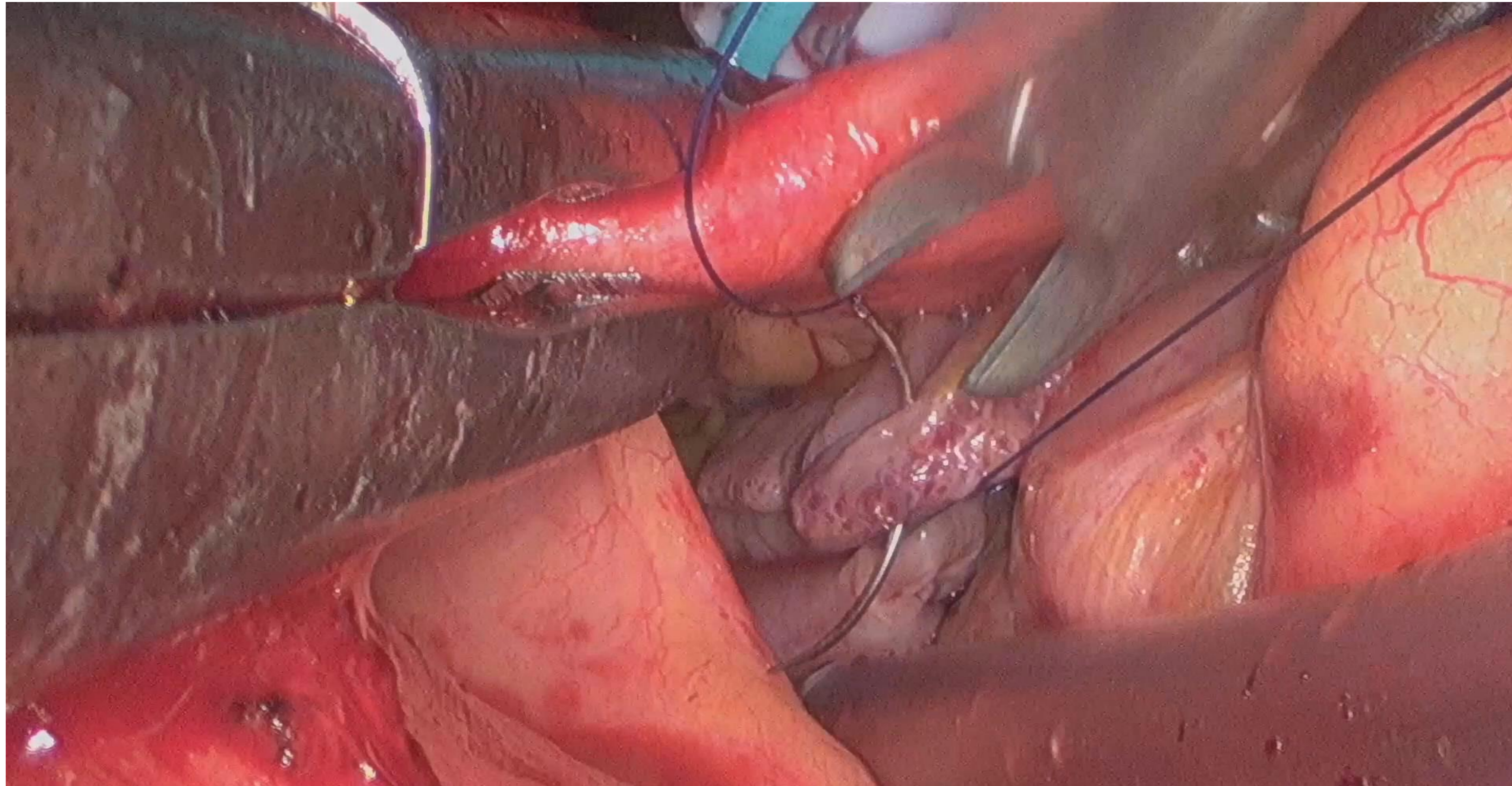
- Probably the tricuspid lesion?
- The options should be discussed with your EP cardiology team
  - They need to know what you do and where they need to look if lesions are incomplete.

# Left atrial Maze-Lesions



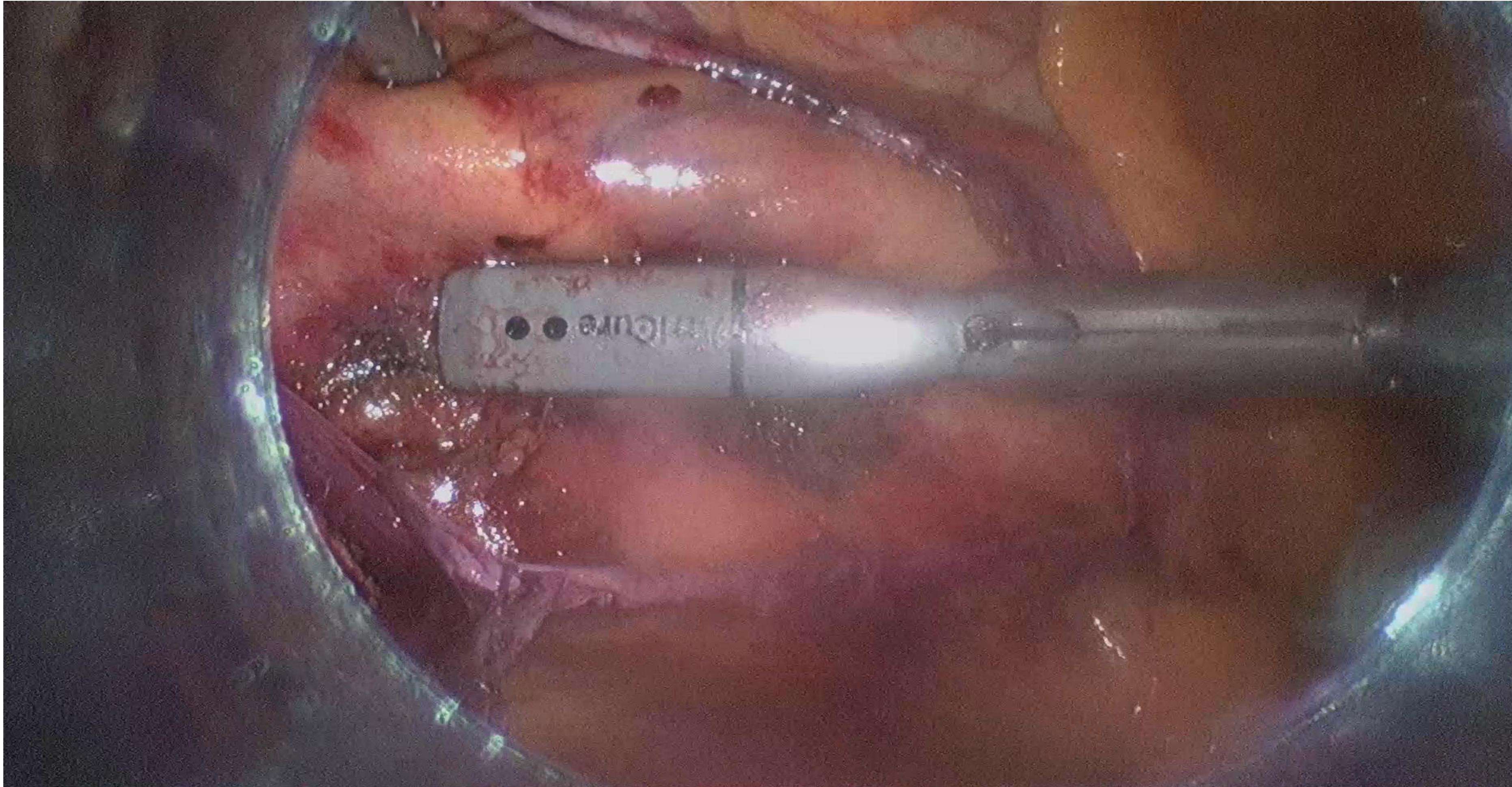


# LAA AtriClip Pro2



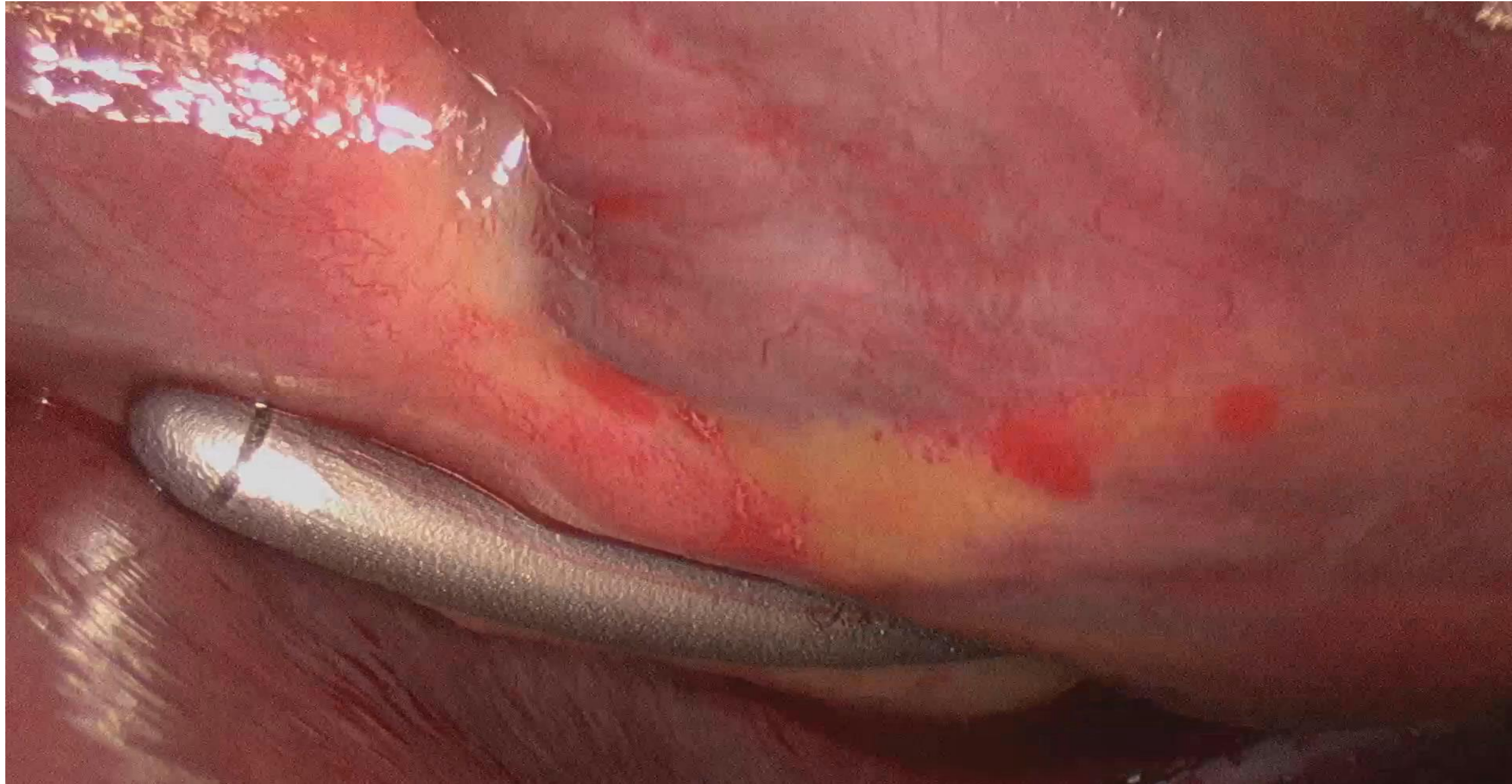


# Right Atrial lesions



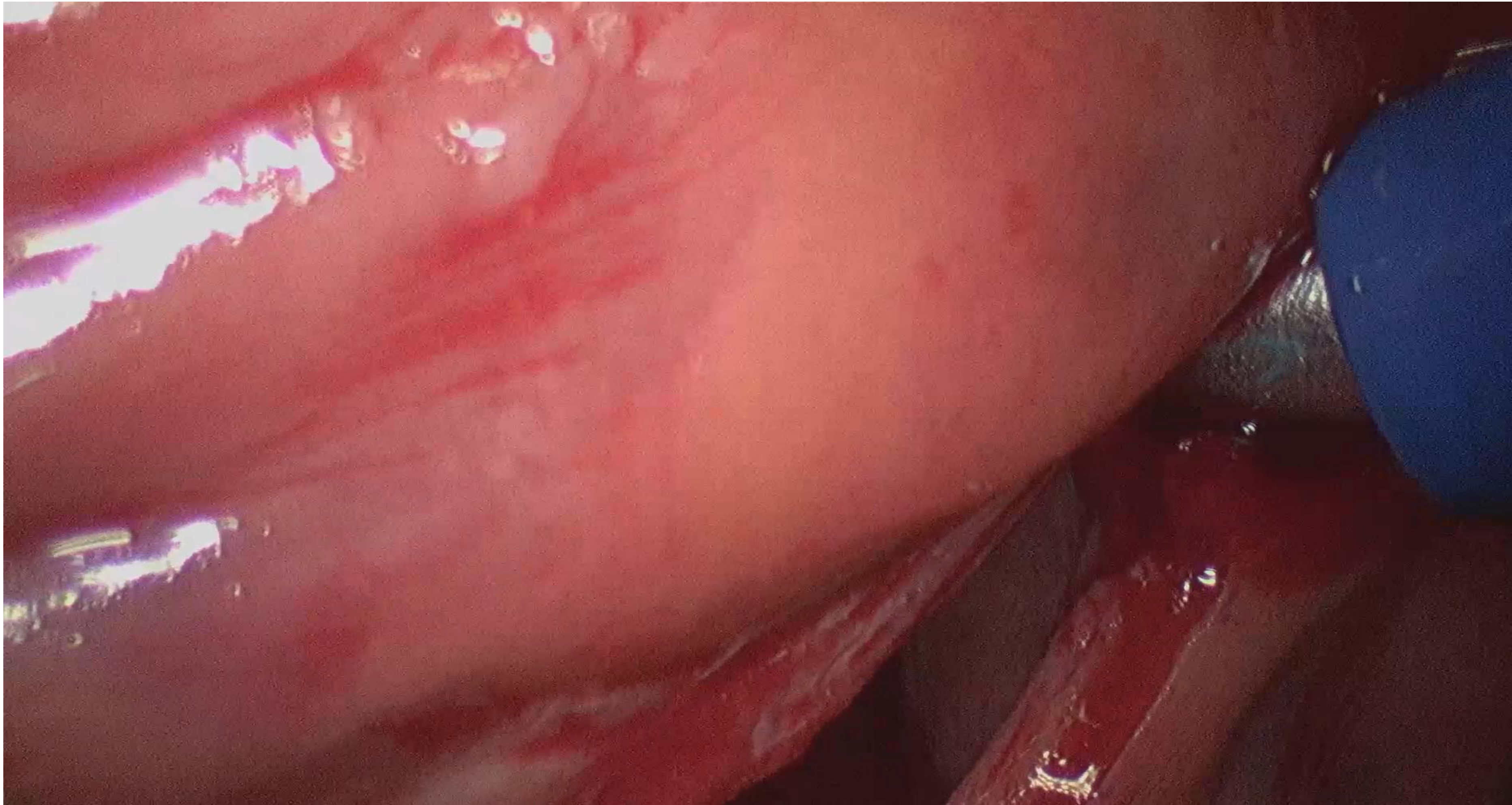


# Right Atrial lesions





# Tricuspid lesion





# Conclusion

- A Cox Maze IV lesion set is possible
- One lesion that can be left is the RA tricuspid lesion
  - If RA flutter occurs it is easily ablated by the EP cardiologist
- Make sure your EP Cardiologists know your lesion set



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The Society  
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Surgeons



EACTS  
European Association for Cardio-Thoracic Surgery

THANK YOU

