

**Percutaneous Left Atrial Appendage Closure using  
ICE monitoring via transoral insertion  
Initial experience and future perspectives**

# Medical History

Age	77
Sex	M
Allergies	None
CHA <sub>2</sub> DS <sub>2</sub> -VASc	4
HAS-BLED	4

**TD: Eliquis 2.5 mg bid**

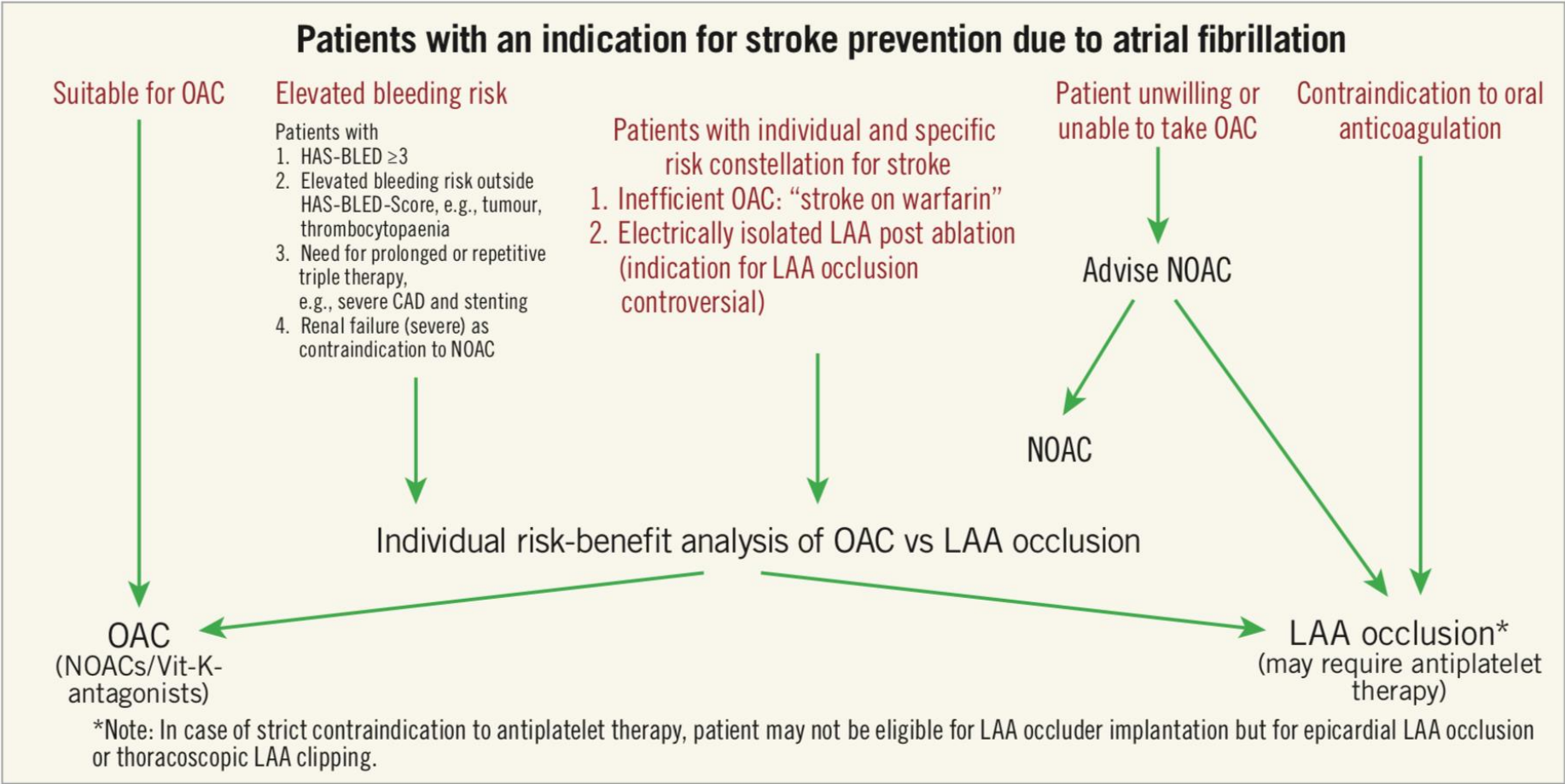
Crea 1.47 – 75 Kg

- Chronic AF
- Arterial Hypertension
- Severe COPD w/ bronchiectasis
- CKD III stage
- Liver Cirrhosis HCV (st B)
- Esophageal Varices (st II-III)
- Mallampati IV

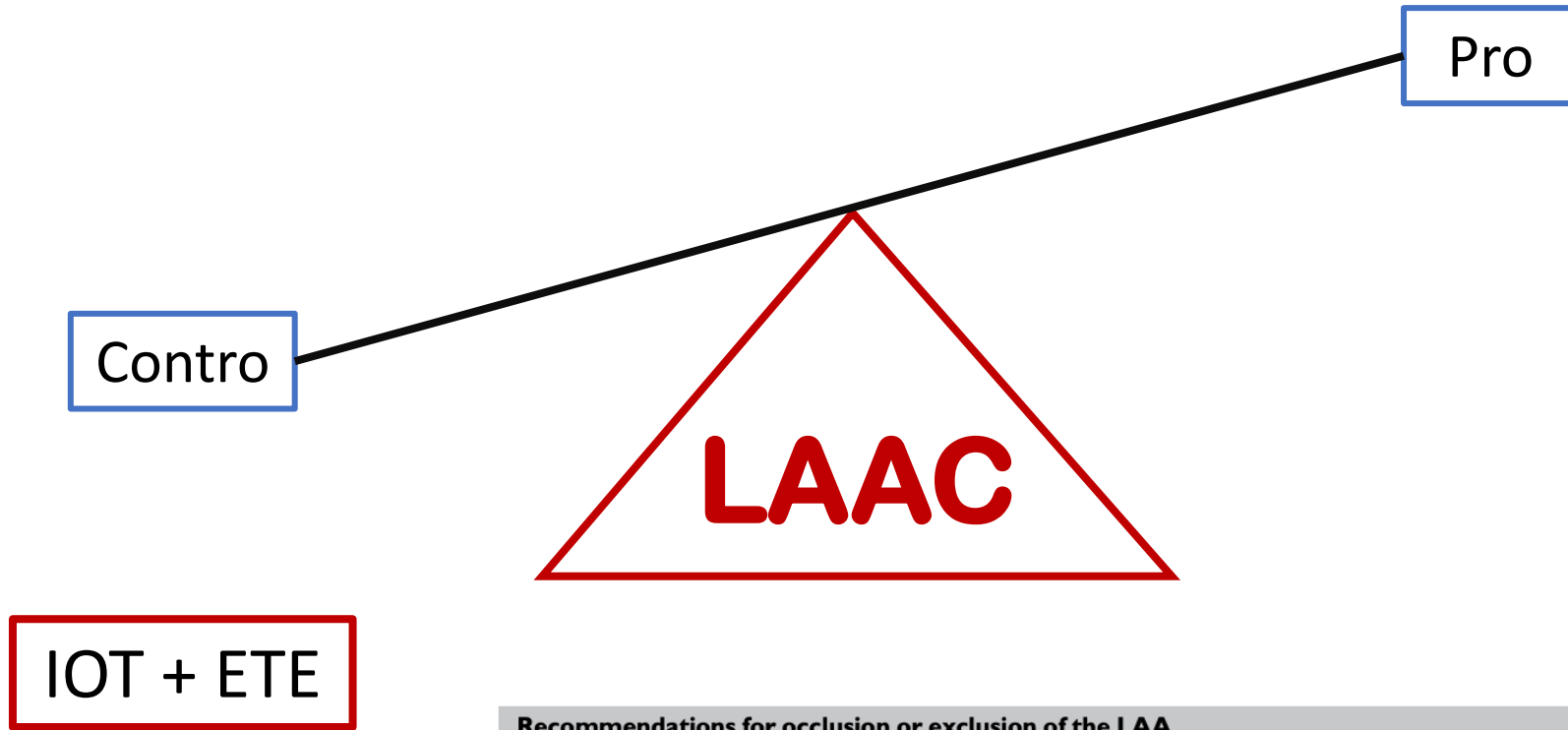
Multiple episodes of anemia requiring blood transfusion  
FOBT+

Videocapsule: duodenal angiodysplasia

# Therapeutic Strategies



# Therapeutic Strategies



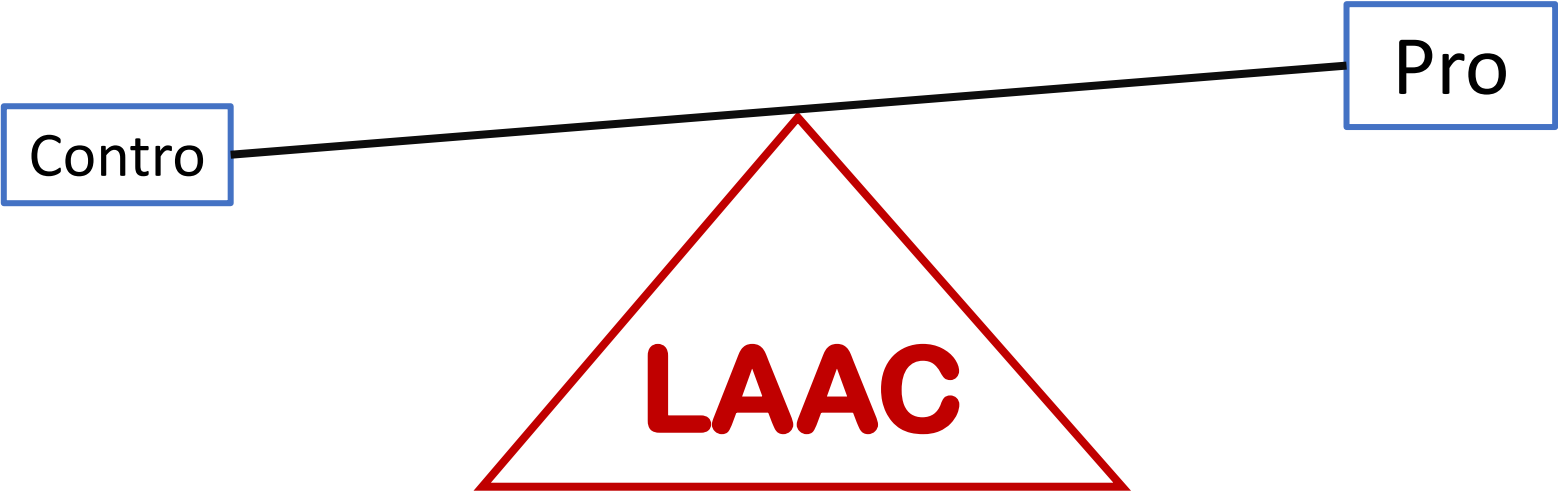
## Recommendations for occlusion or exclusion of the LAA

LAA occlusion may be considered for stroke prevention in patients with AF and contraindications for long-term anticoagulant treatment (e.g. intracranial bleeding without a reversible cause).<sup>448,449,481,482</sup>

**IIb**

**B**

# Therapeutic Strategies



MicroTEE/ICE

**Recommendations for occlusion or exclusion of the LAA**  
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**IIb**

**B**

# Therapeutic Strategies

Contro

Pro



ICE TE

## Recommendations for occlusion or exclusion of the LAA

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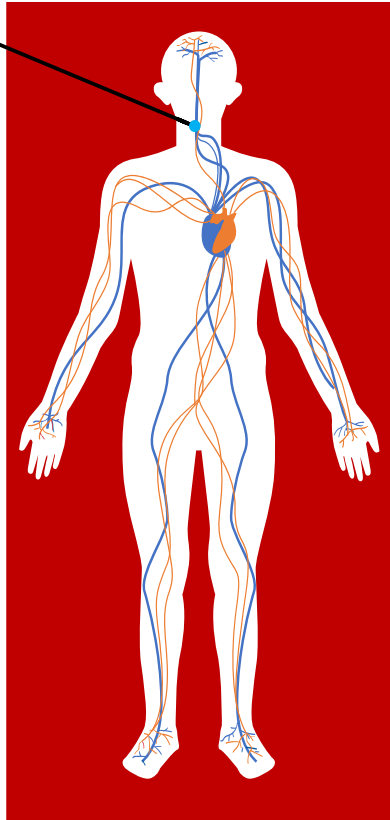
**IIb**

**B**

# ICE peri op

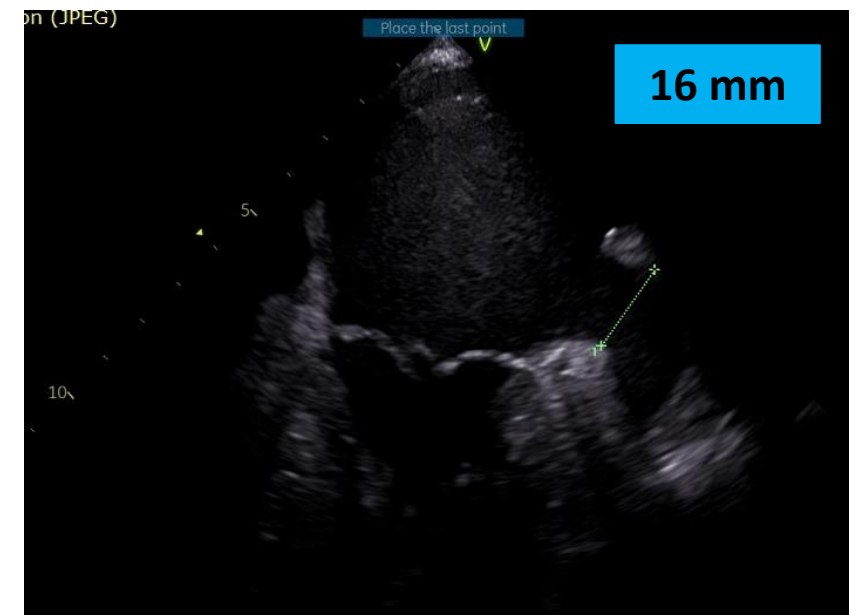
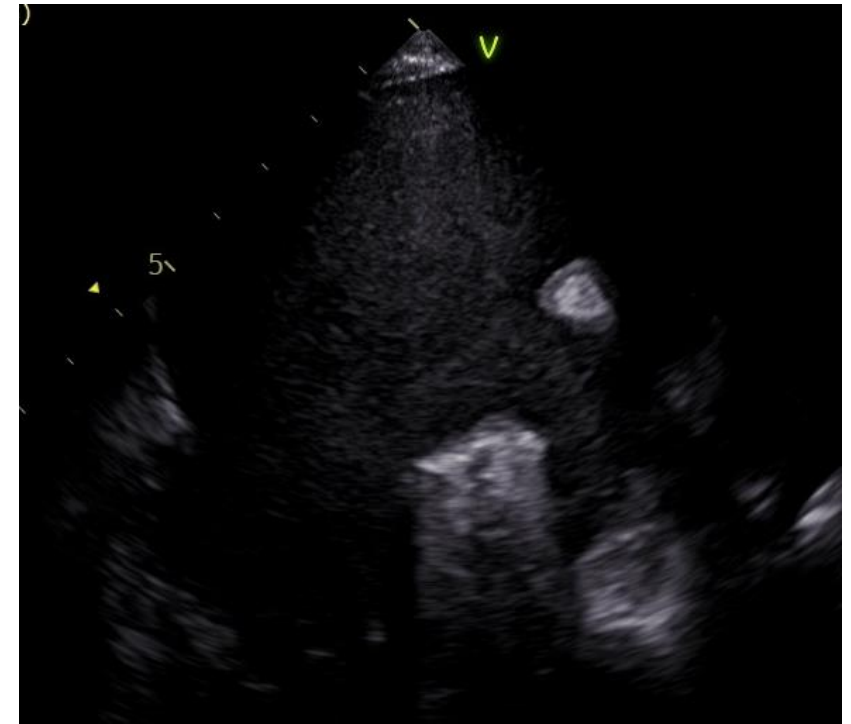
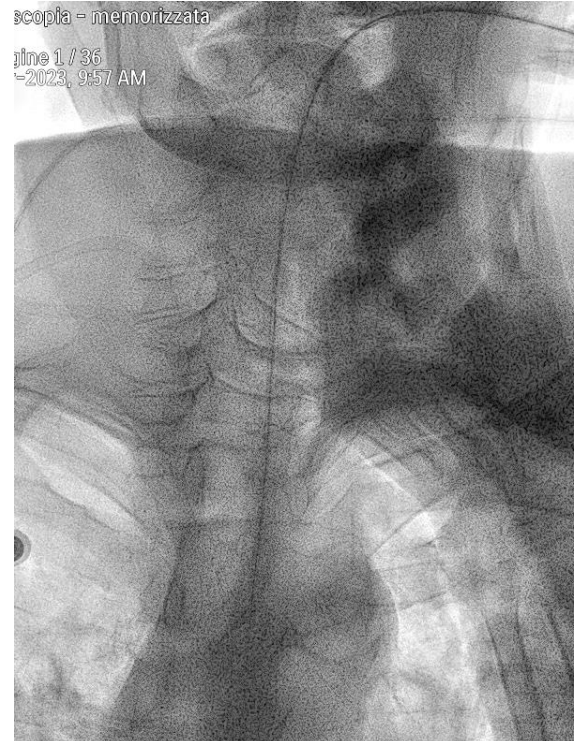
ICE probe (AcuNav  
soundstar 8 Fr)  
transoral

ETE ICE

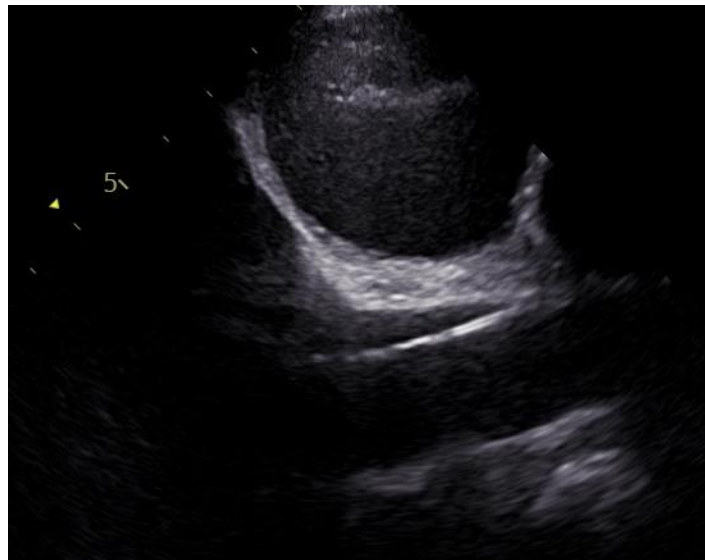
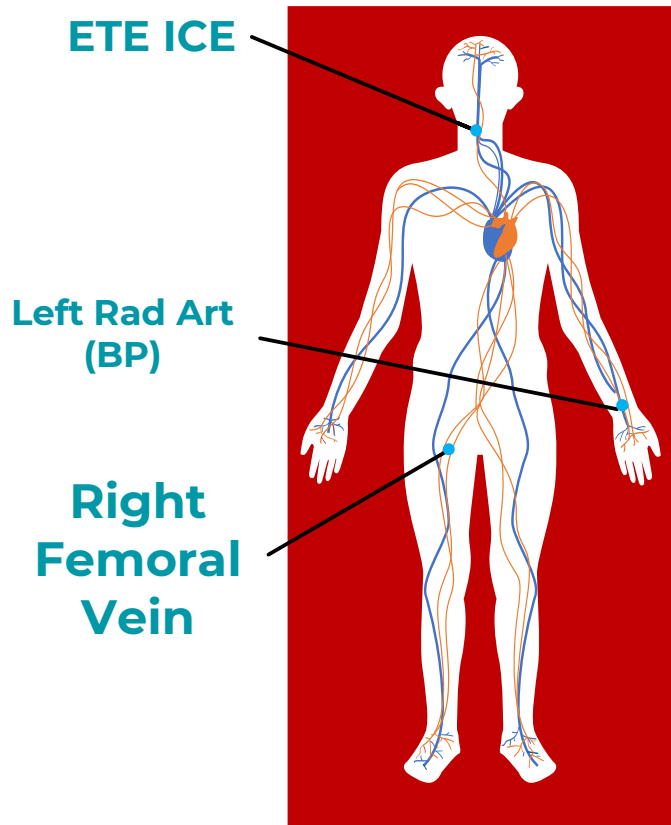
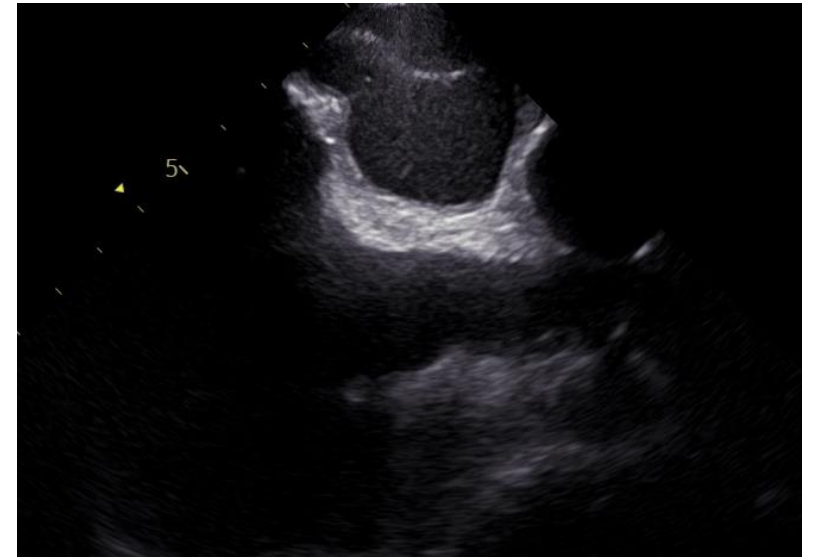
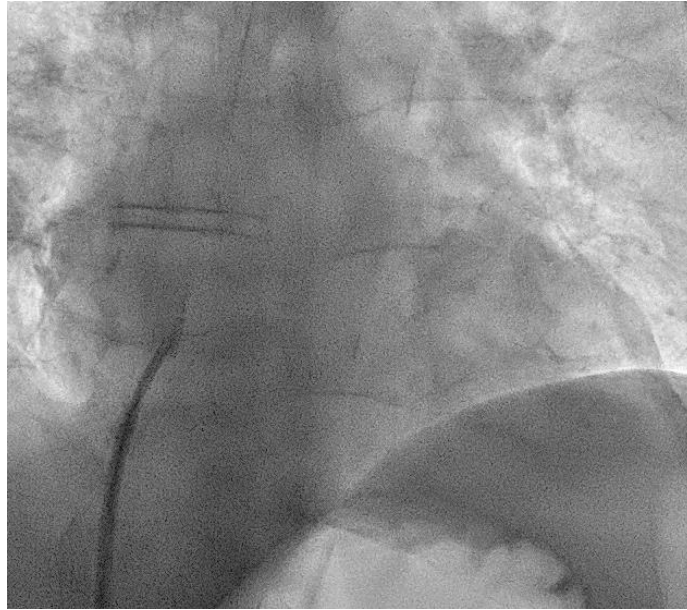


## Pre Medication

- Floroglucina/trimetossibenzene
- Metoclopramide 10 mg
- Midazolam 4 mg



# Trans Septal Puncture

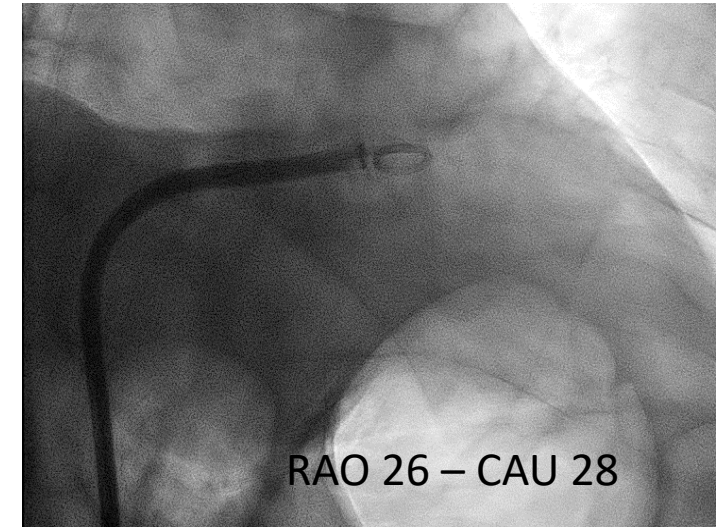
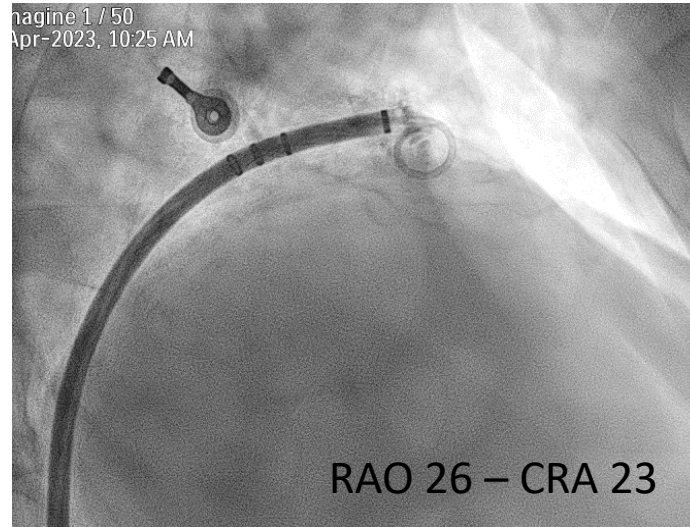




- Aspirin 250 mg i.v.
- Heparin 5000 UI i.v.

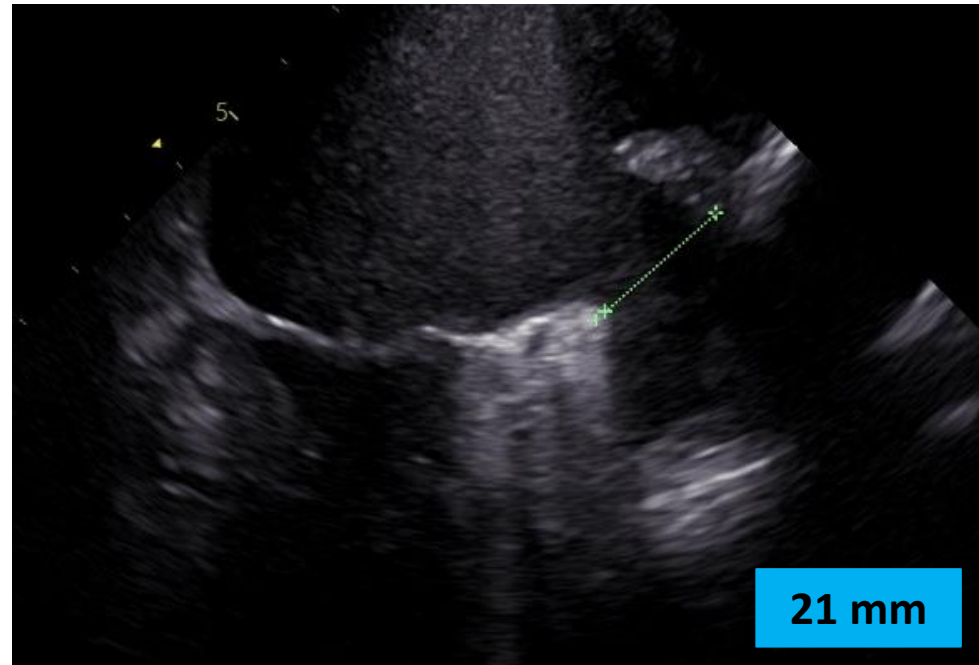
# Sizing

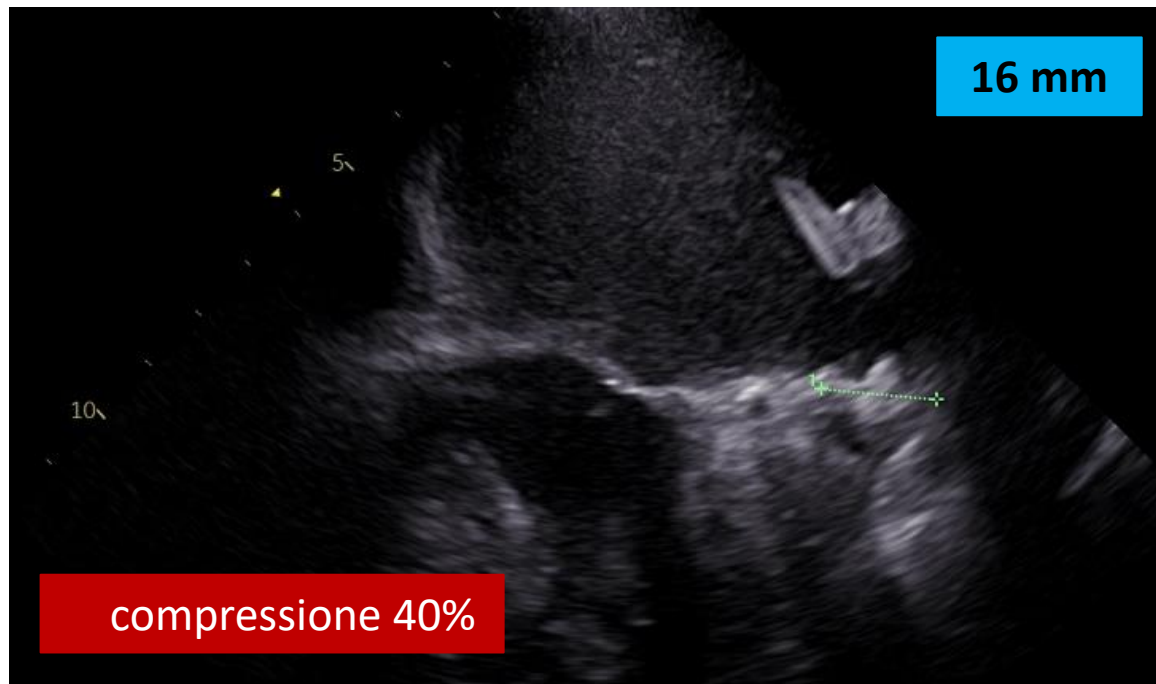
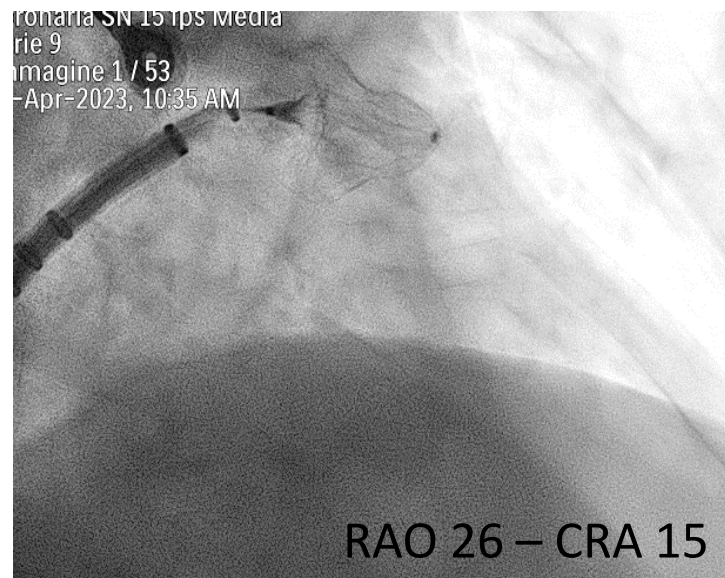
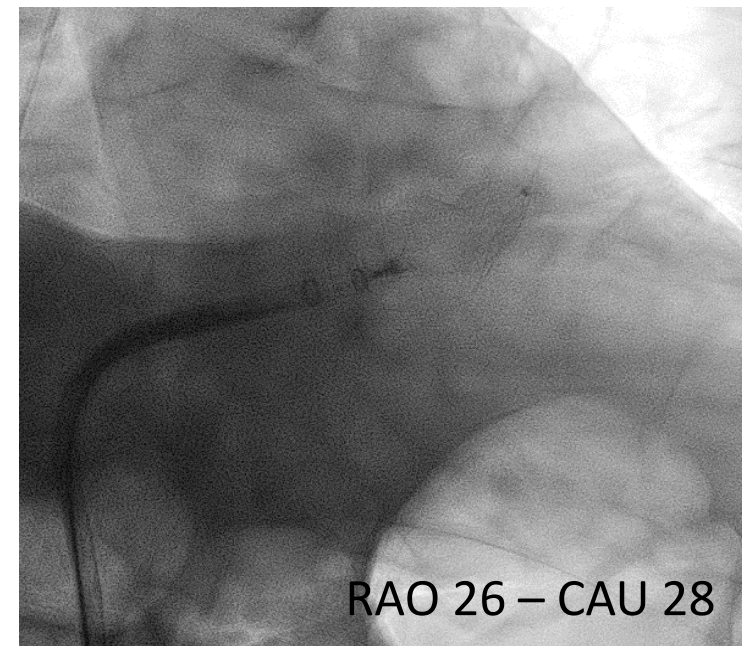
BP (AO): 90/60 mmHg  
BP (LA): 8/2 (5) mmHg



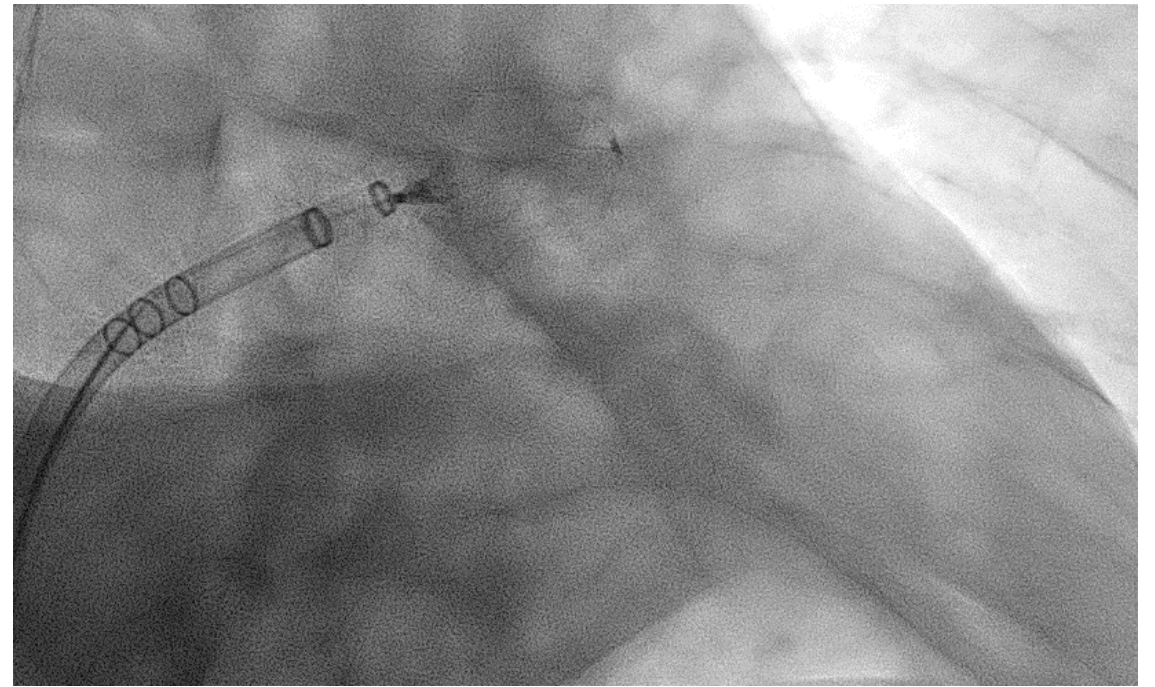
## Fluid Challenge

- LAA Ostium 21 mm
- Watchmen FLX 27 mm

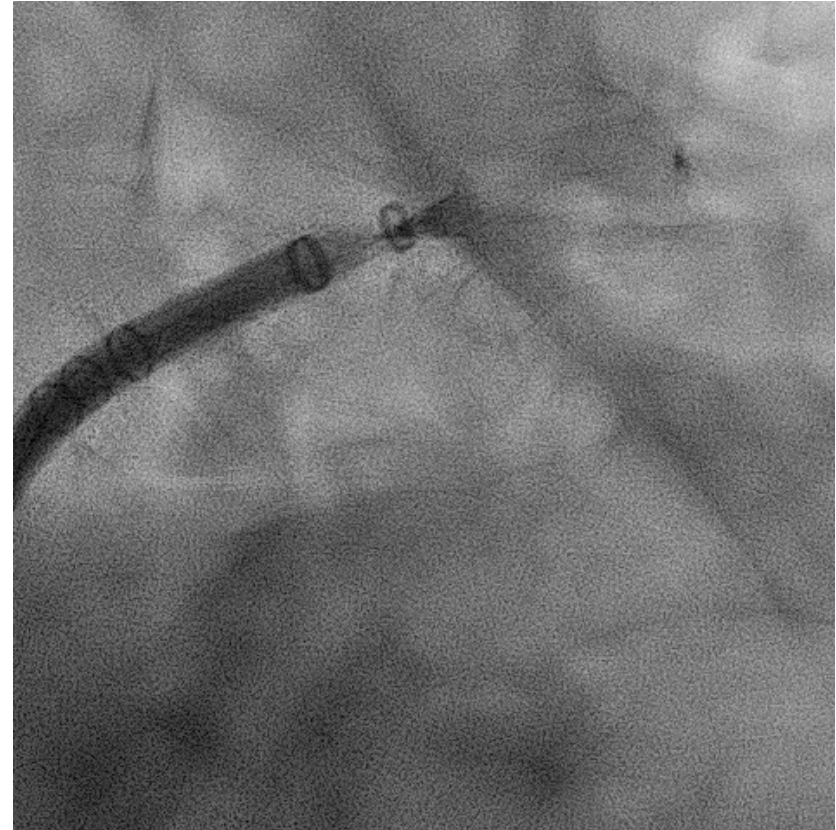




- Position
- Anchoring
- Sizing
- Sealing



- Position
- Anchoring
- Sizing
- Sealing



**Post Op:**  
**- Plavix 600 mg per os**

**3<sup>rd</sup> day discharge**  
**No complications**

**1 month DAPT → SAPT (clopidogrel)**

# Conclusions

- ICE probe transoral monitoring is a valid alternative to standard transoral echo imaging
- This technique allows perioperative imaging even in non intubable patients
- In centers where ICE is already available, this technique could result in procedural time optimization and better resource management

**RCTs and cost-effectiveness analysis are required to  
validate said technique**

At the moment, transoral ICE usage is off label

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