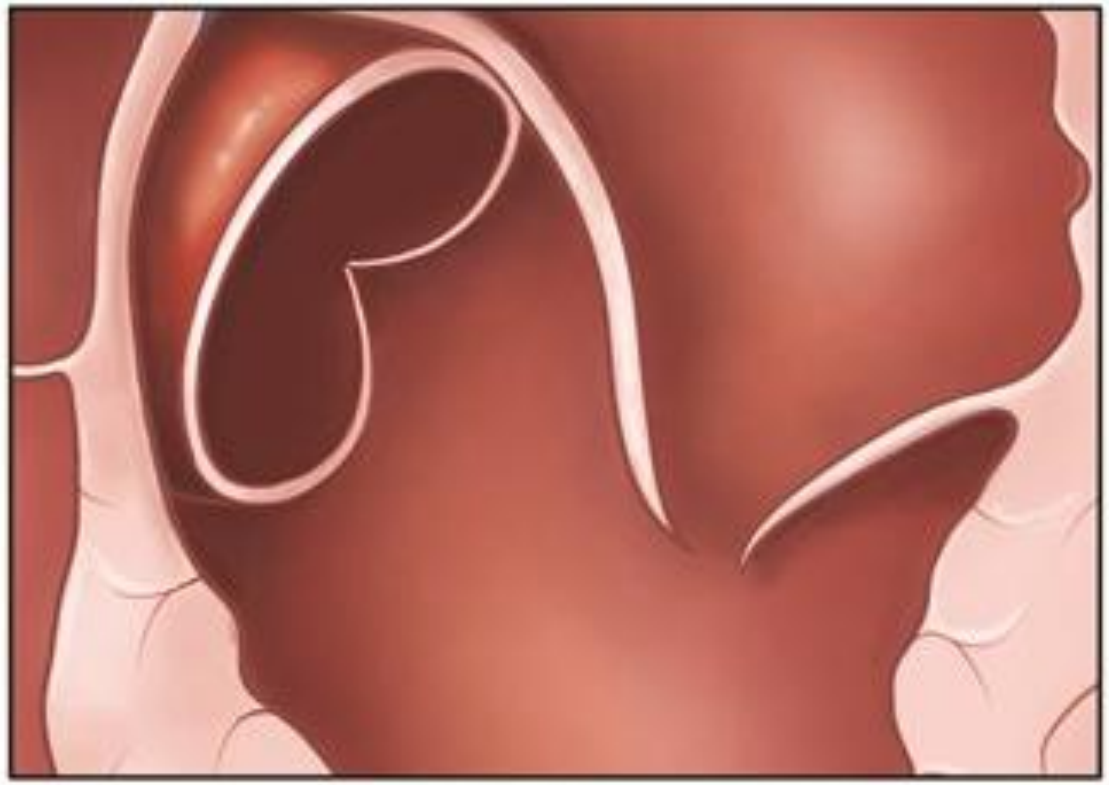
Mitrální chlopeň a obstrukce LVOT – co můžeme nabídnout?

P. Branny, J. Januška, J. Balušík, M. Hudec

Kardiocentrum Nemocnice Agel Třinec – Podlesí, a.s.

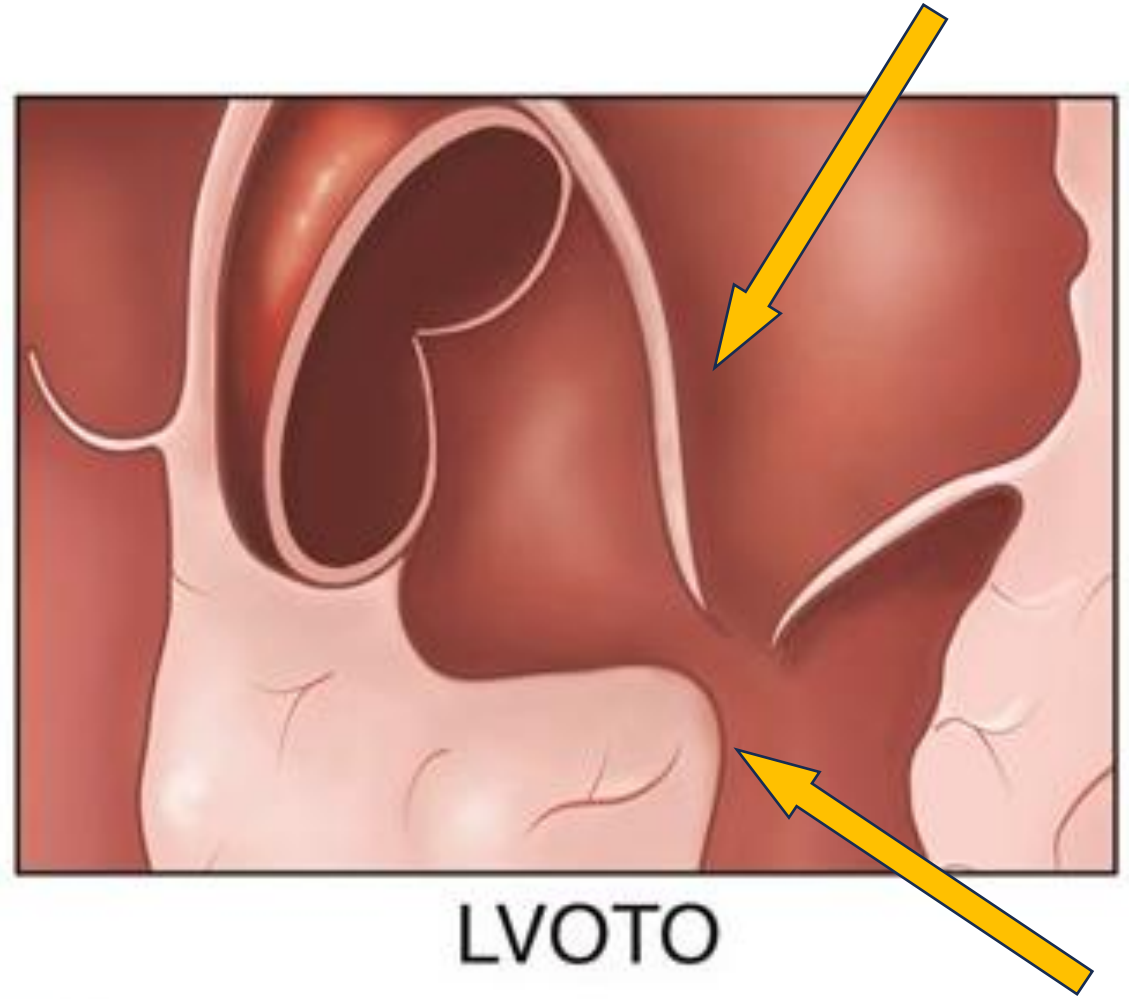
výtokový trakt levé komory - LVOT

- septum
- přední cíp mitrální chlopně



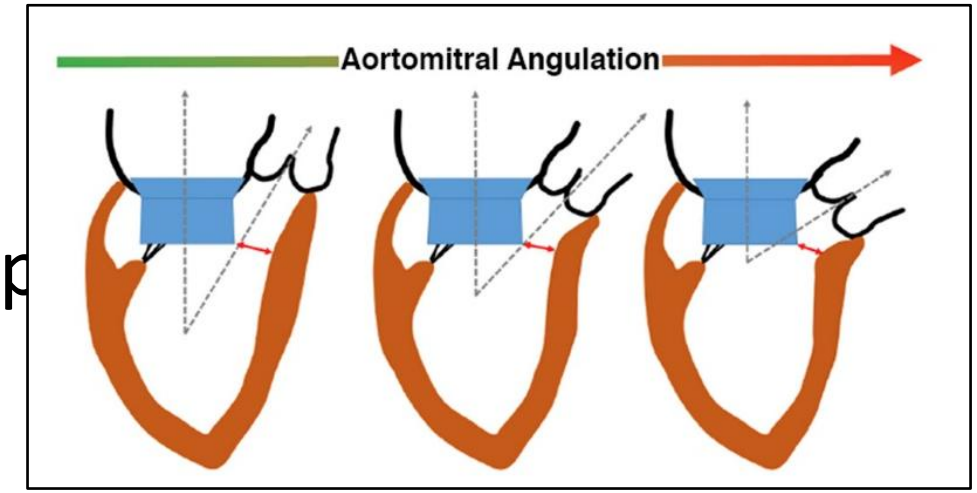
obstrukce nativního LVOT

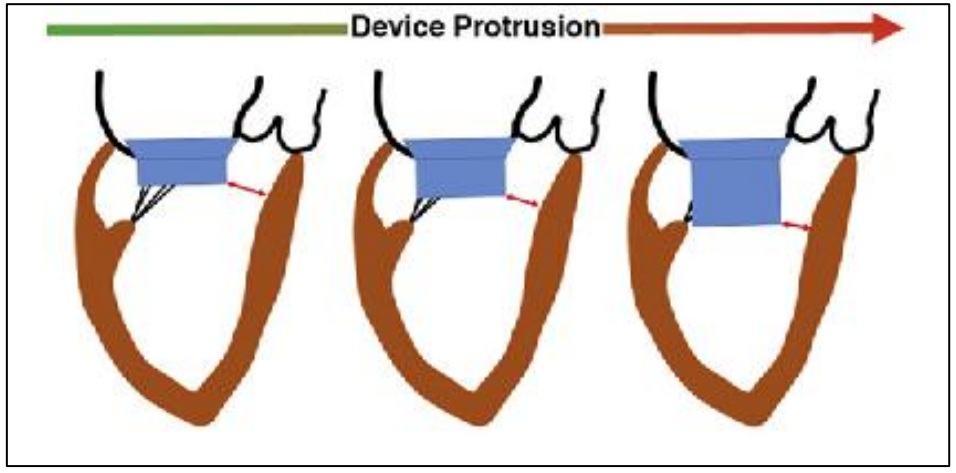
- hypertrofie septa
- SAM
- kombinace obojího



obstrukce LVOT při náhradě Mi chlopně

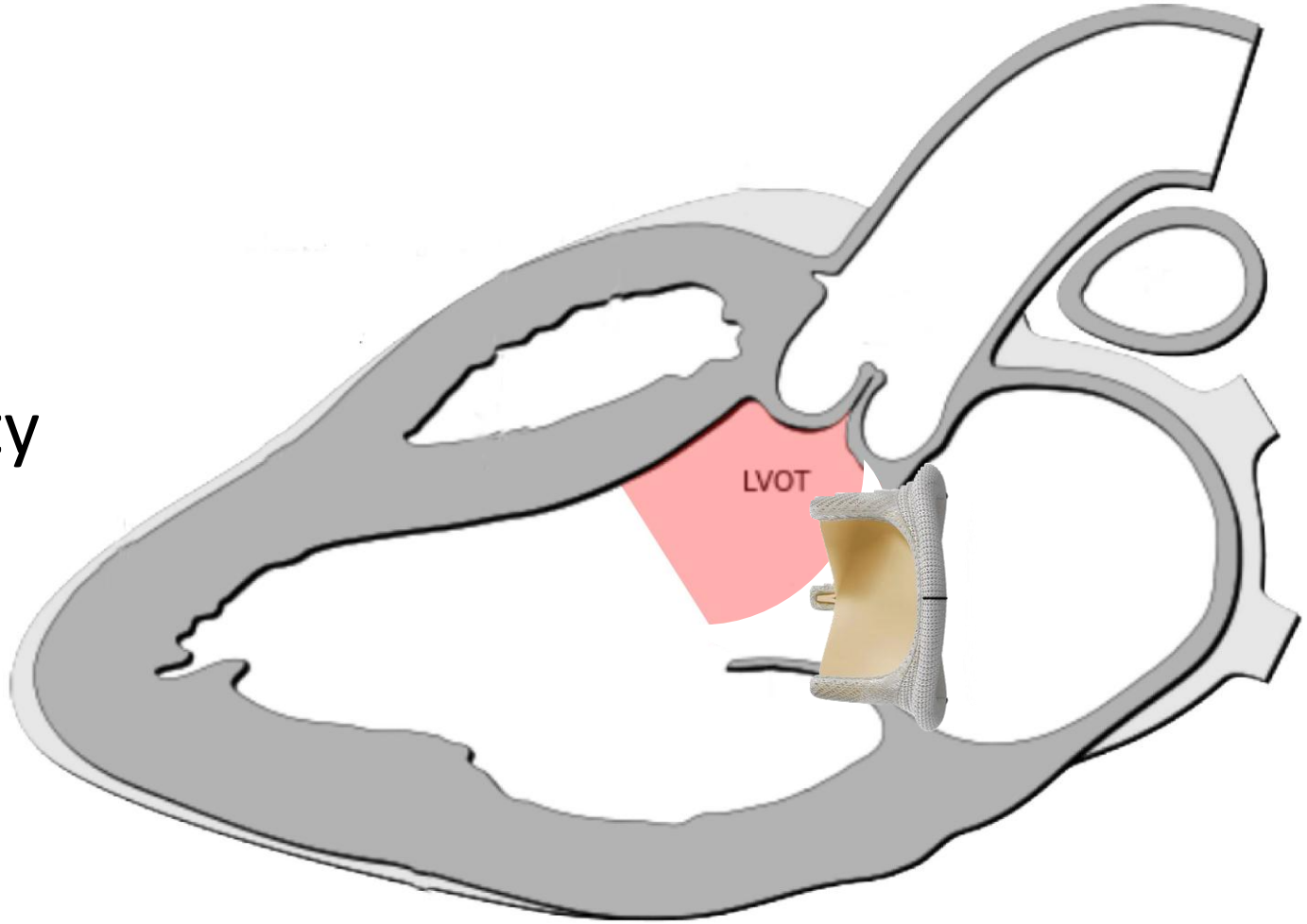
- septum
- přední cíp MV – displacement – p
- aorto-mitrální úhel
- typ, velikost a tvar protézy





chirurgická náhrada – MVR

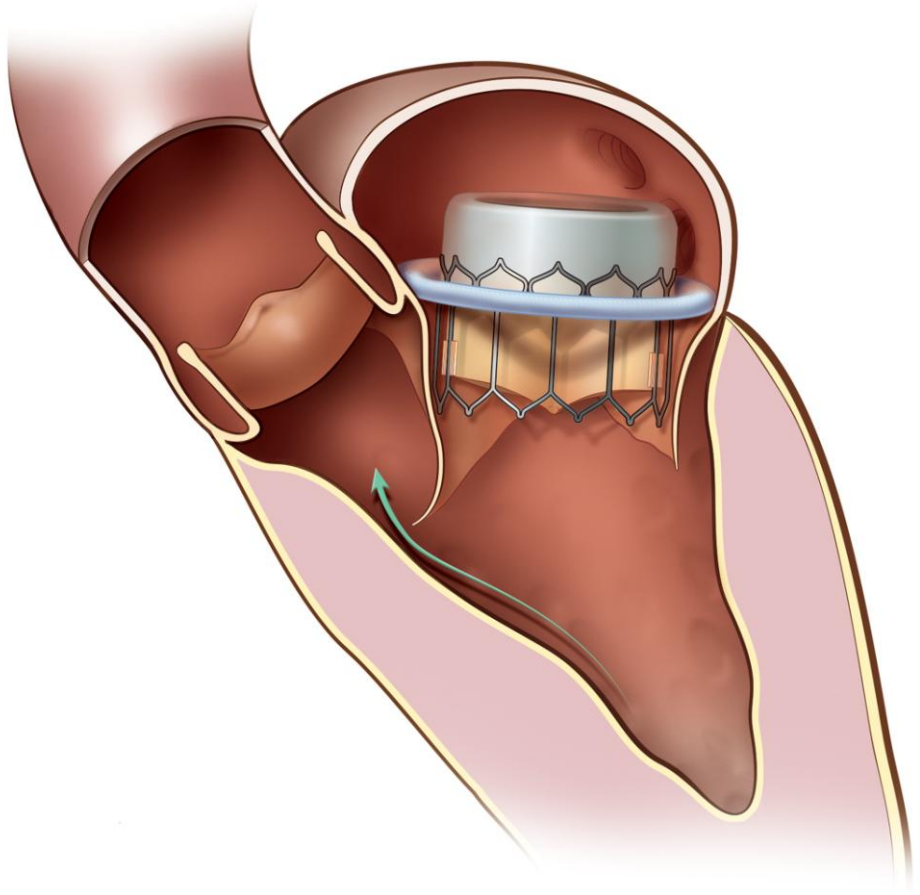
- resekce PC
- přešití PC na zadní cíp
- LVOT mezi dvěma pivoty



Intervenční náhrada Mi chlopně

- Valve in Ring
- Valve in Valve
- TMVR

- Valve in Ring

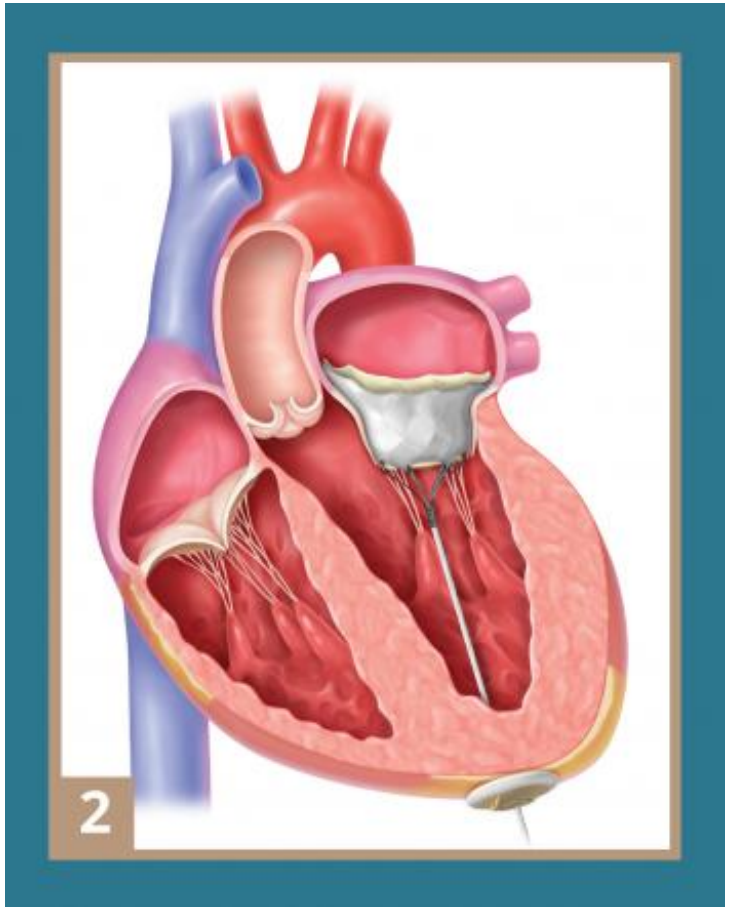


• Valve in Valve

- není PC mitrální chlopně
- trvale otevřeny cípy bioprotézy

• TMVR – Tendyne

- displacement PC mitrální chlopně
- relativně velká protéza (modelování)



Jaké jsou terapeutické možnosti?

PC mitrální chlopně

- LAMPOON
- Device mediated AML laceration
- MitraCut technique
- ELASTA

septum

- PTSMA
- SESAM

Mitrální chlopeň - LAMPOON technique

Intentional **L**aceration of the **A**nterior **M**itral leaflet to **P**revent Left Ventricular **O**utflow Tract **O**bstructio**N**

Base to Tip

- antegrádní — levá síň – levá síň
- retrográdní — aorta - aorta

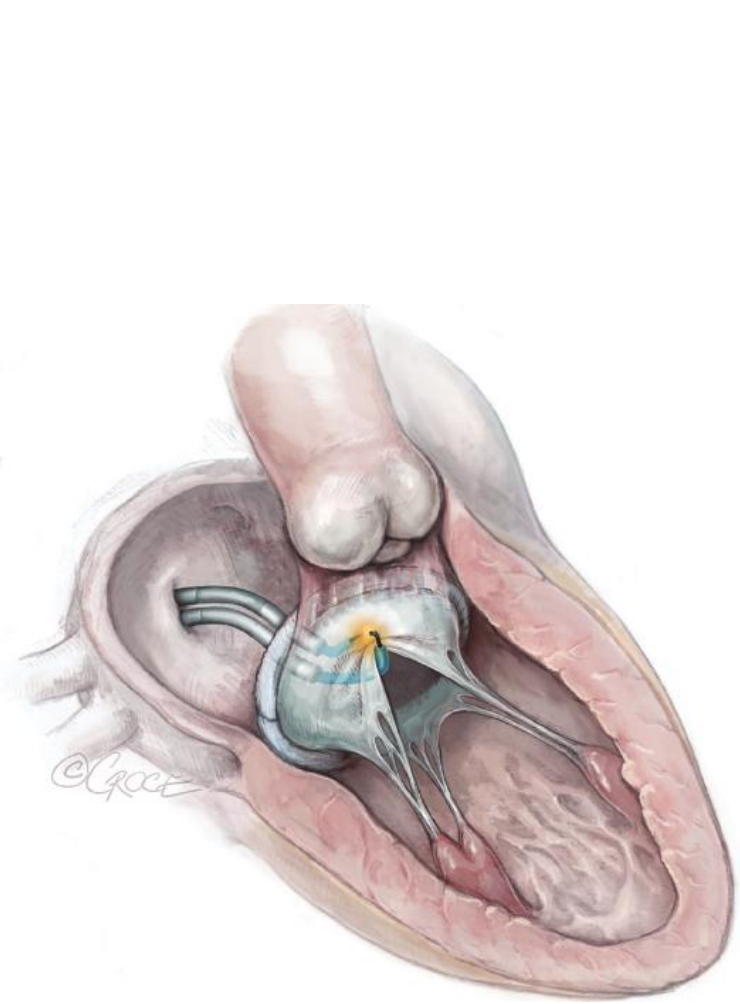
Tip to Base

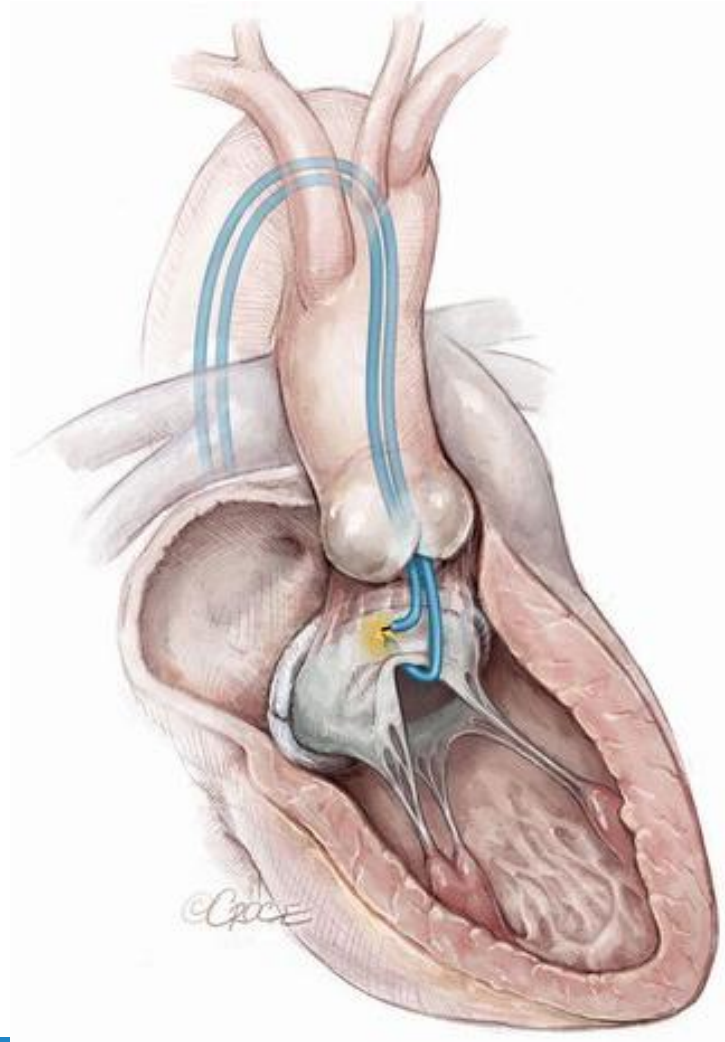
- levá síň - aorta

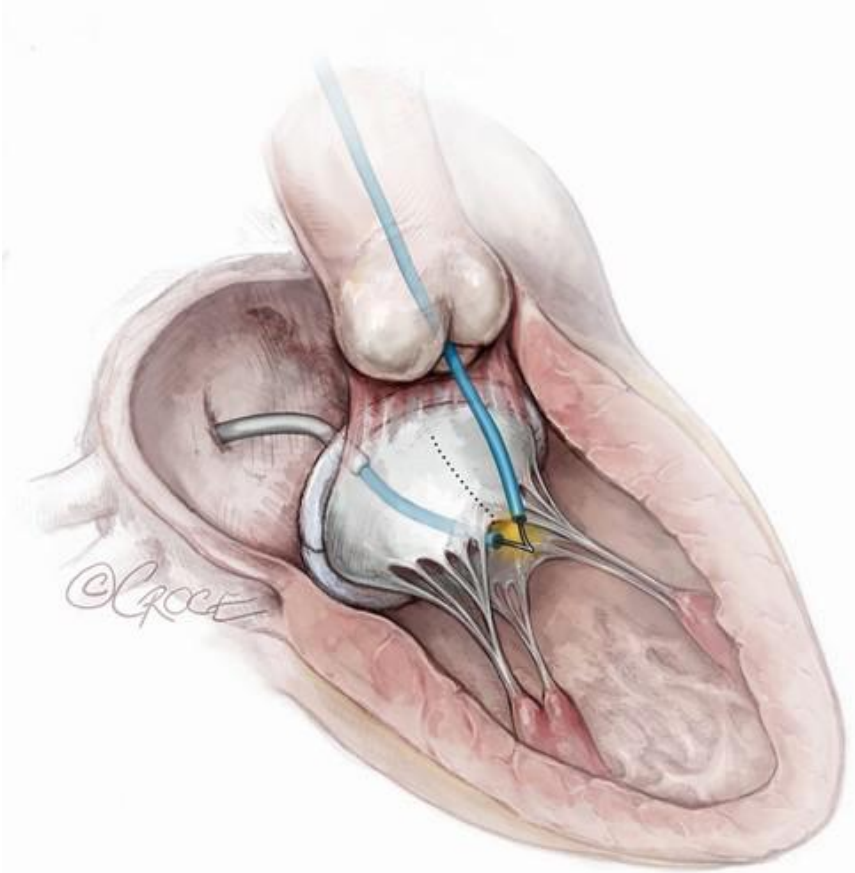
LAMPOON technique

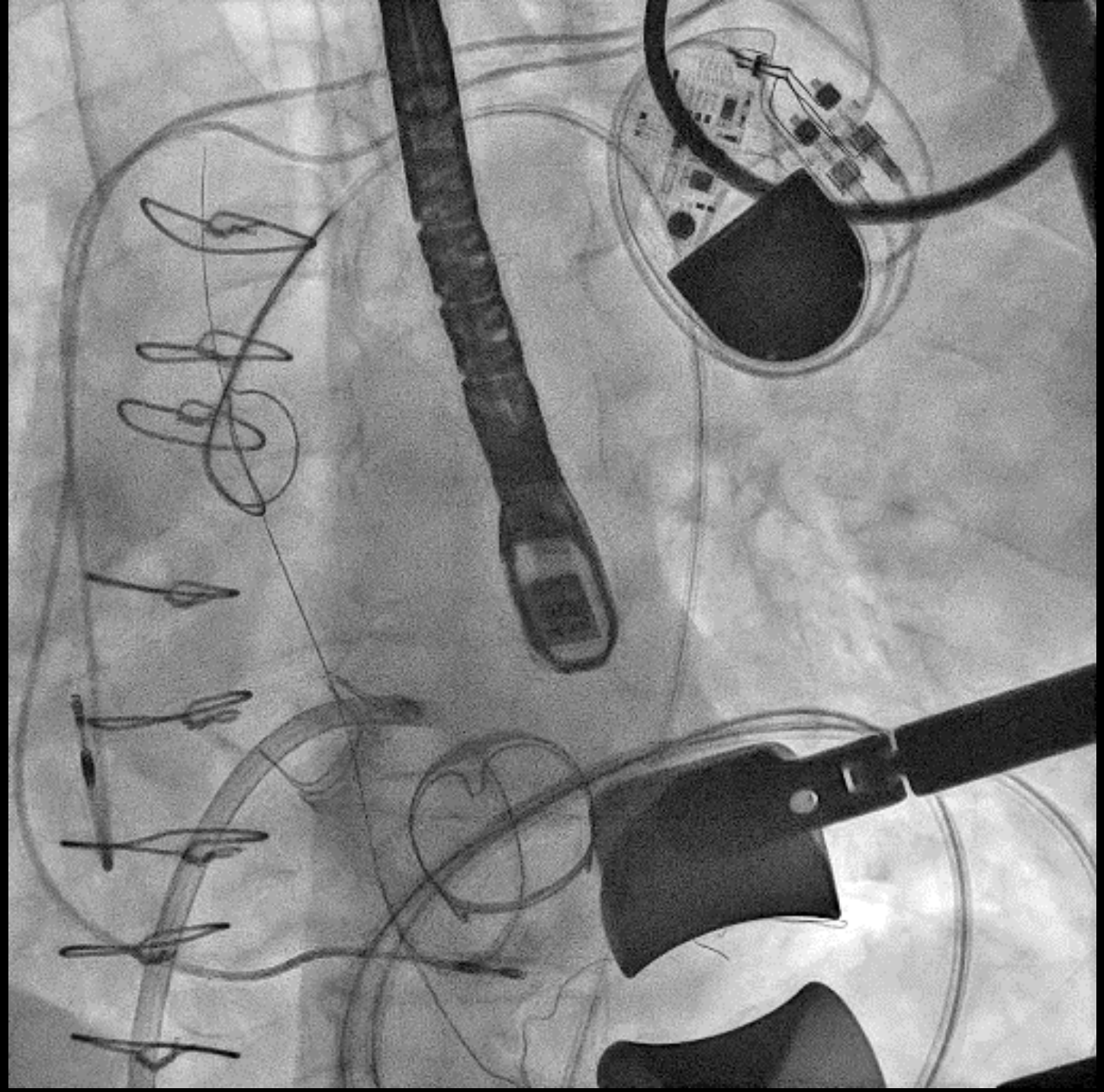
Base to tip

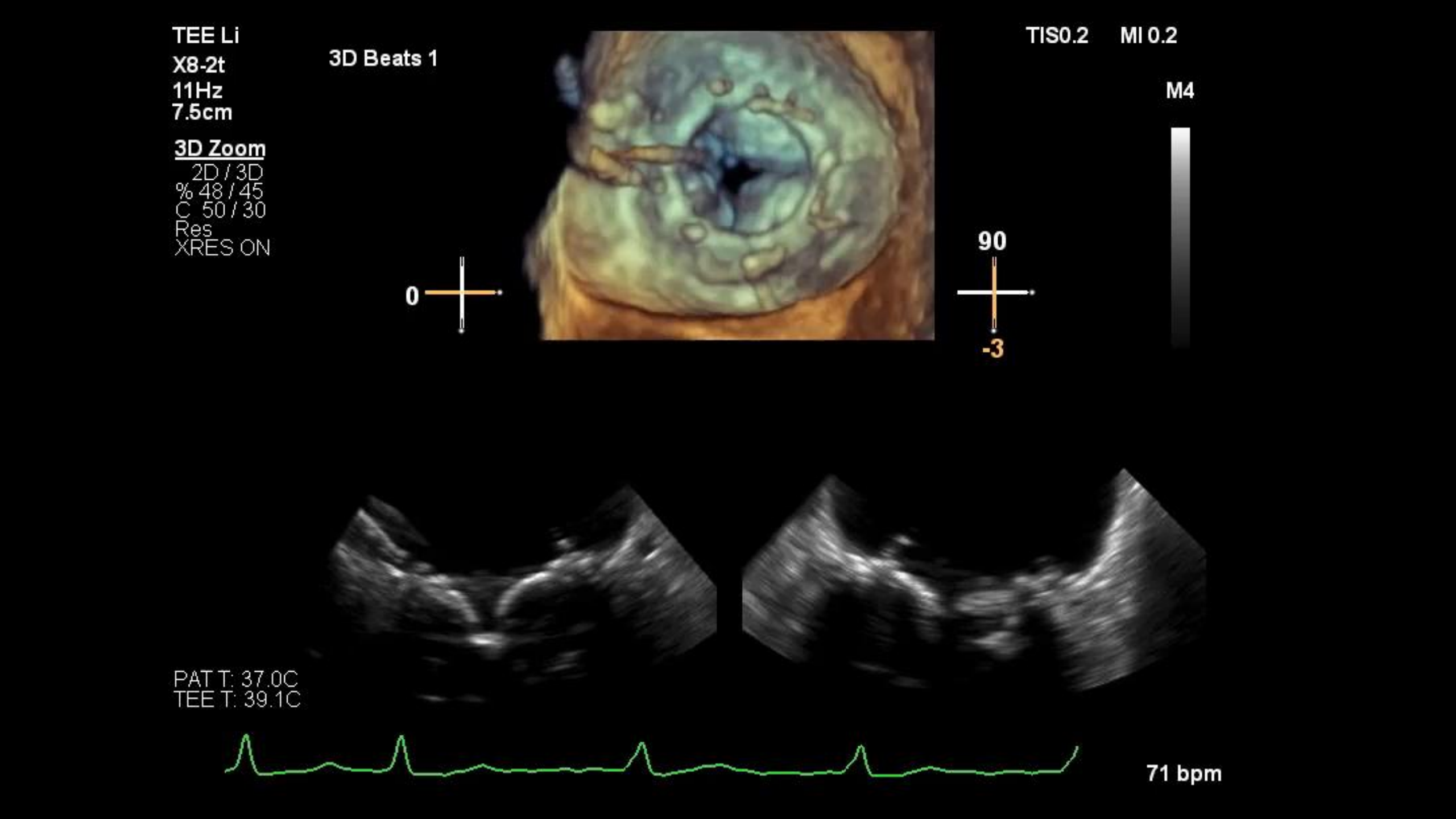
Tip to base



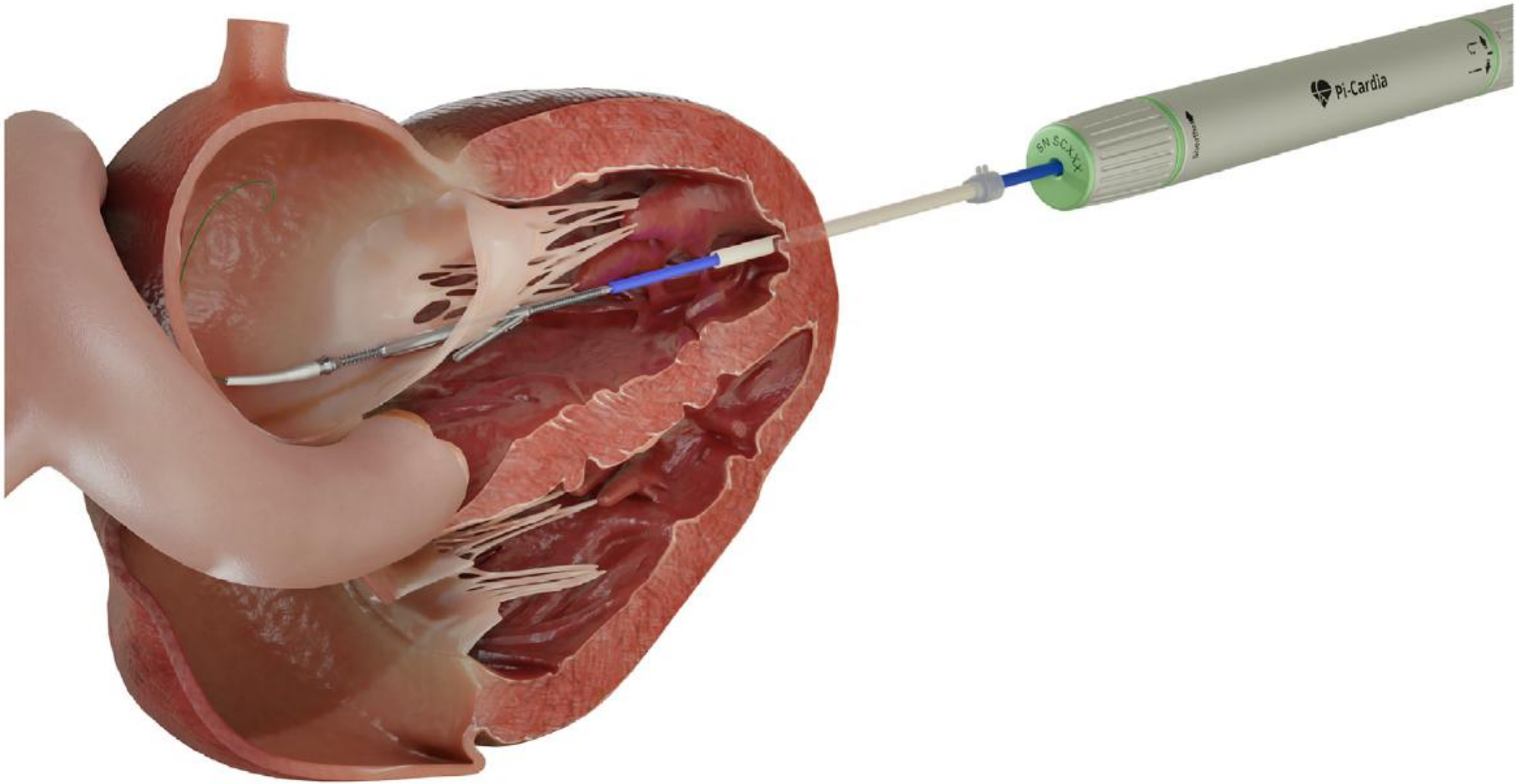




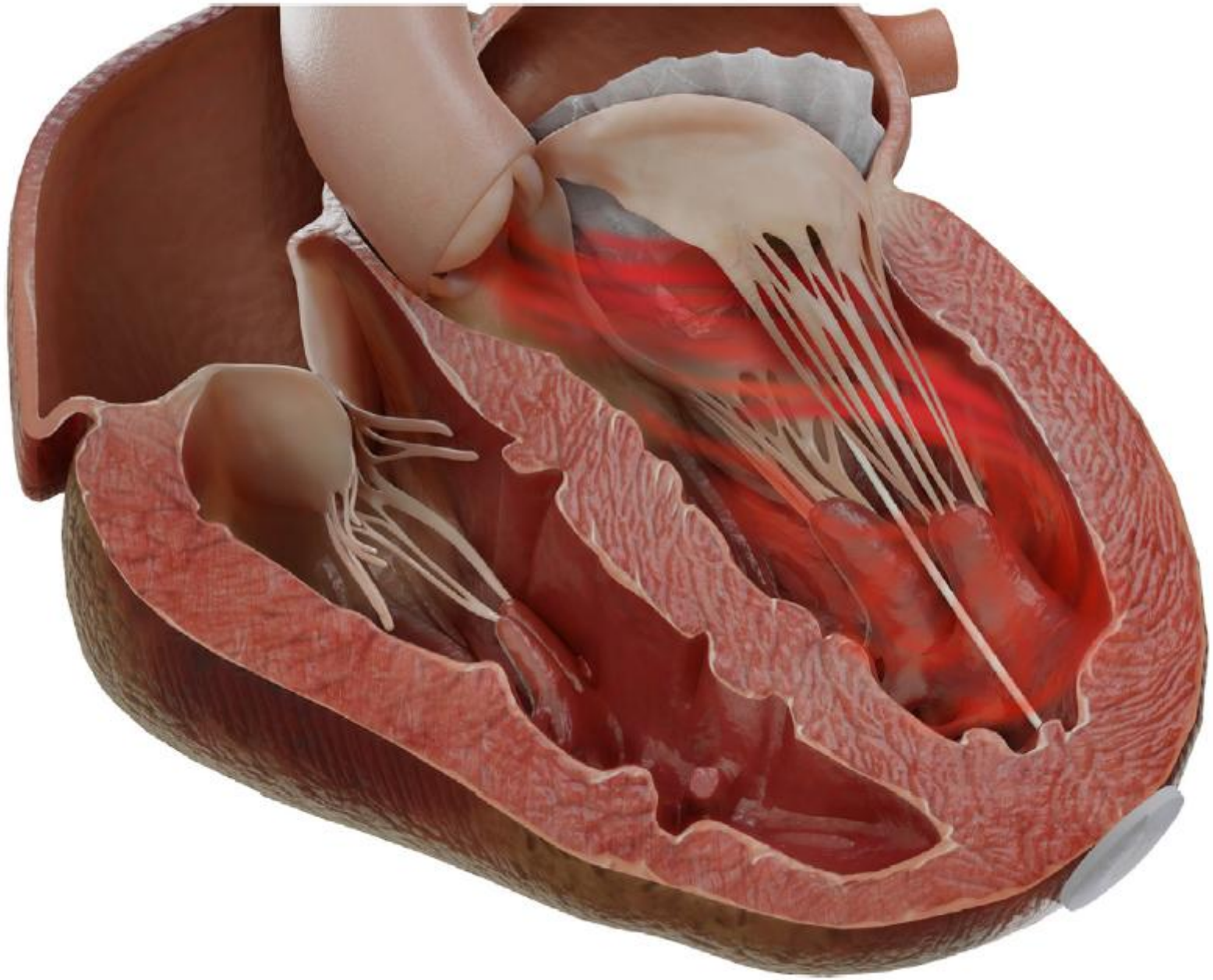



TEE Li
X8-2t
11Hz
7.5cm
3D Zoom
2D / 3D
% 48 / 45
C 50 / 30
Res
XRES ON
3D Beats 1
TIS0.2 MI 0.2
M4
0
90
-3
PAT T: 37.0C
TEE T: 39.1C
71 bpm

Device-Mediated AML Laceration

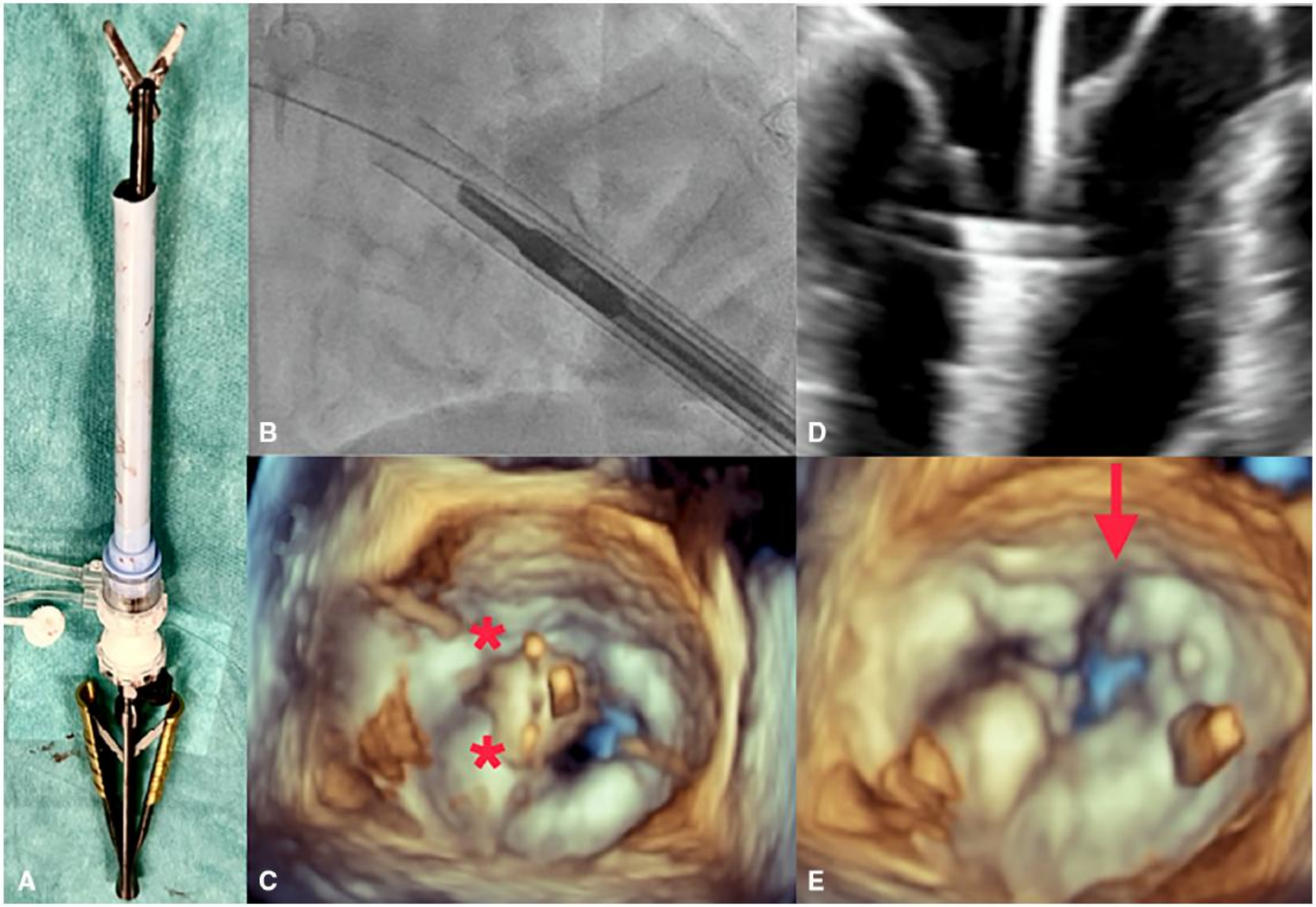


Ludwig S, et al. J Am Coll Cardiol Case Rep. 2023;16:101873.



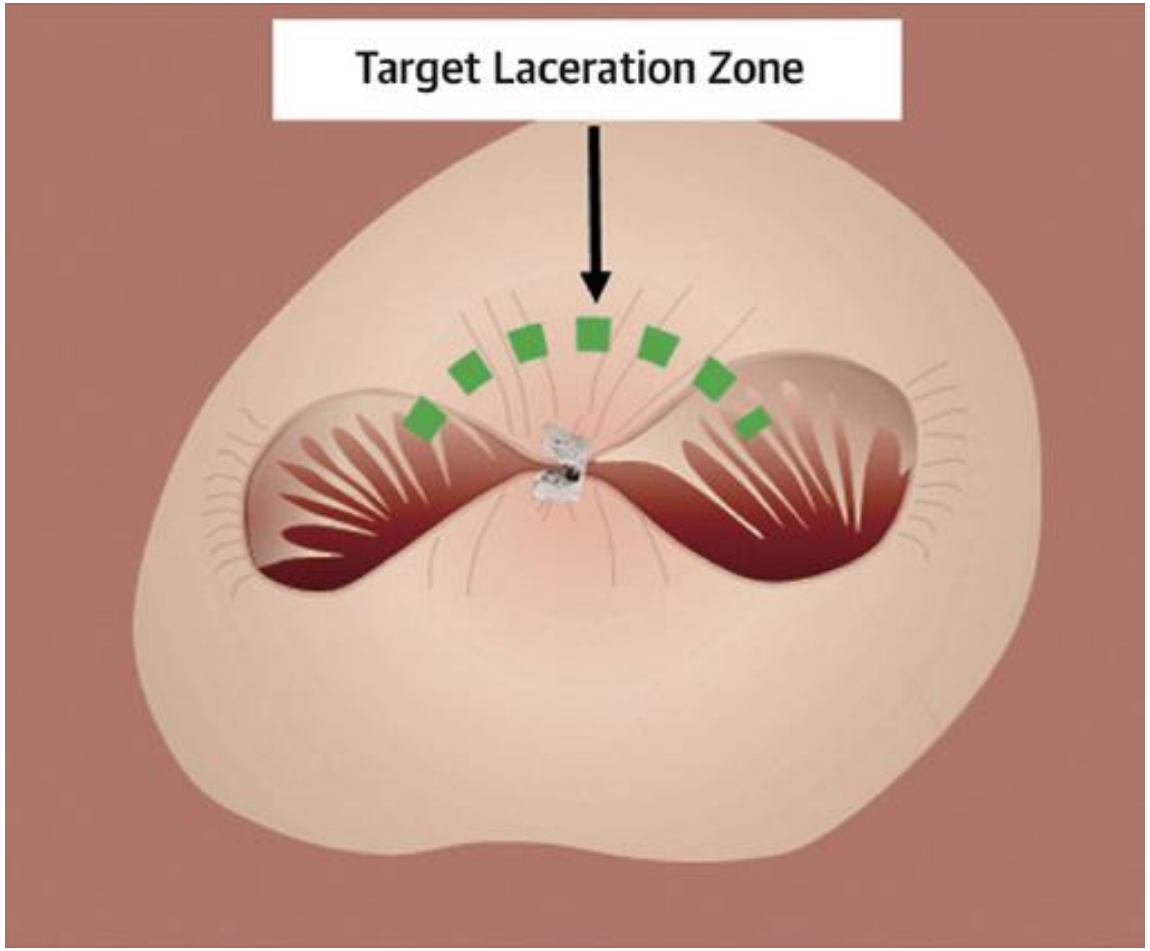
Andreas M, et al. JTCVS Tech. 2023 Feb 12;18:53-56

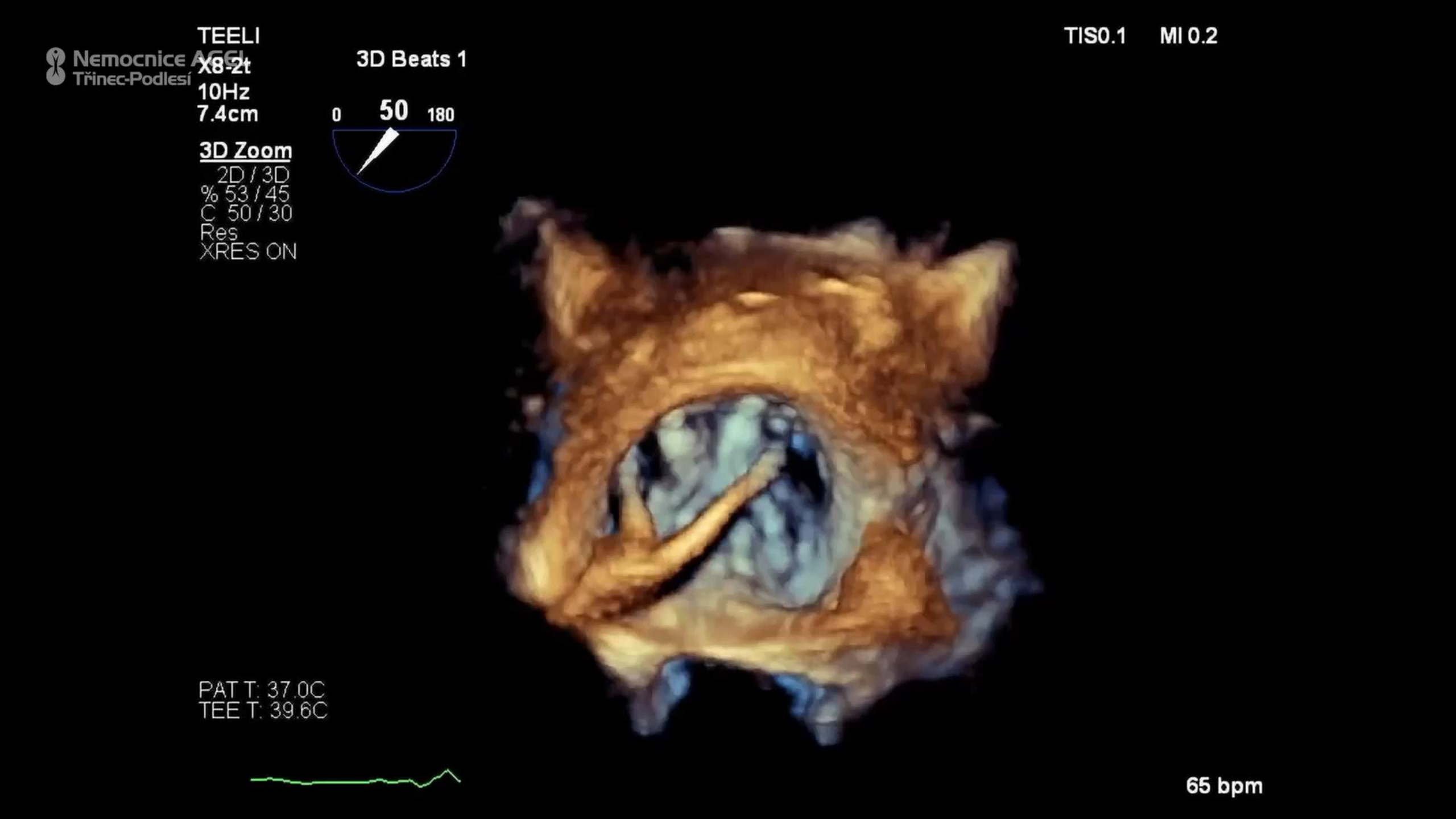
MitraCut technique



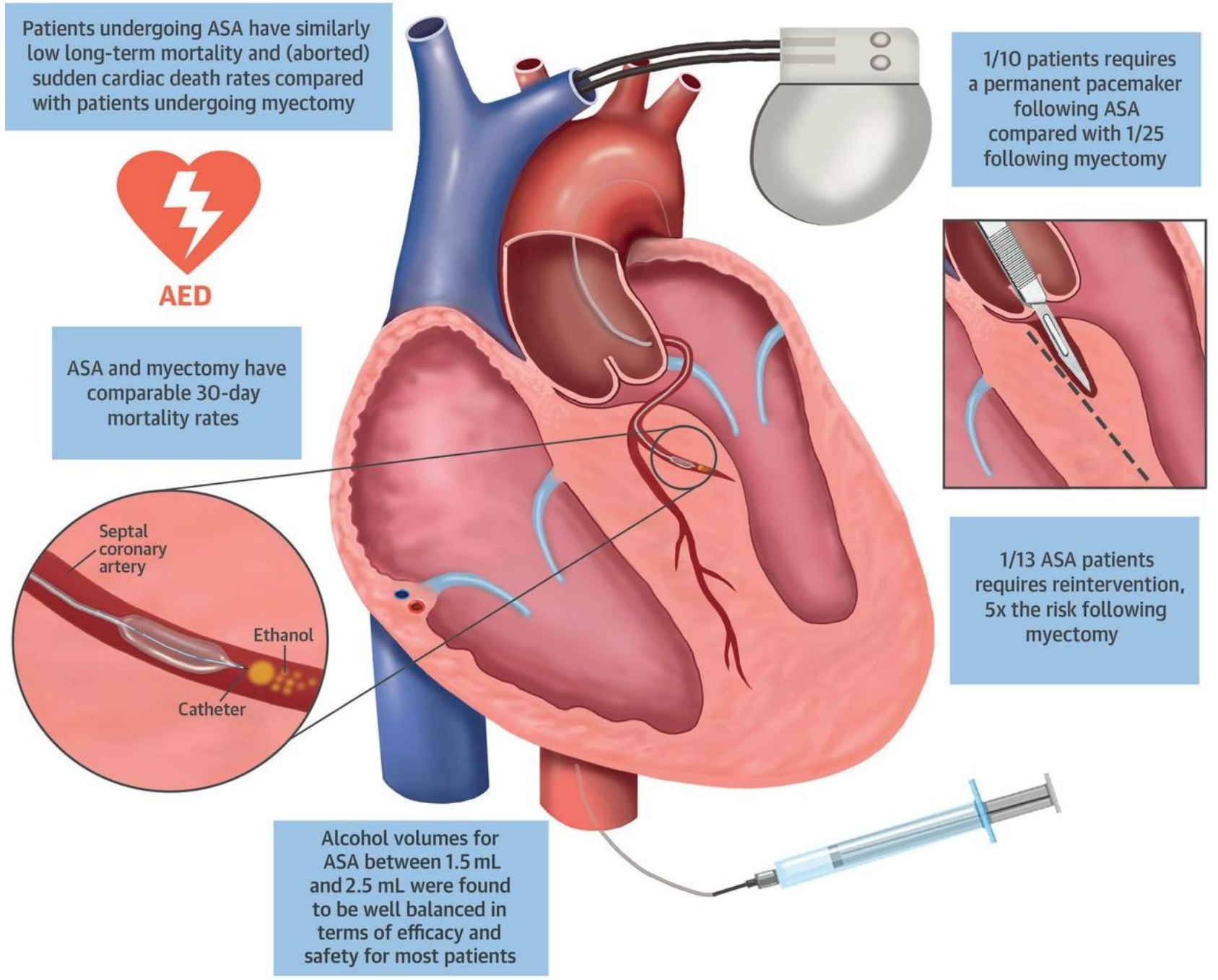
ELASTA Clip

Electrosurgical **LA**ceration and **STA**bilization of failed Mitra**Clip**



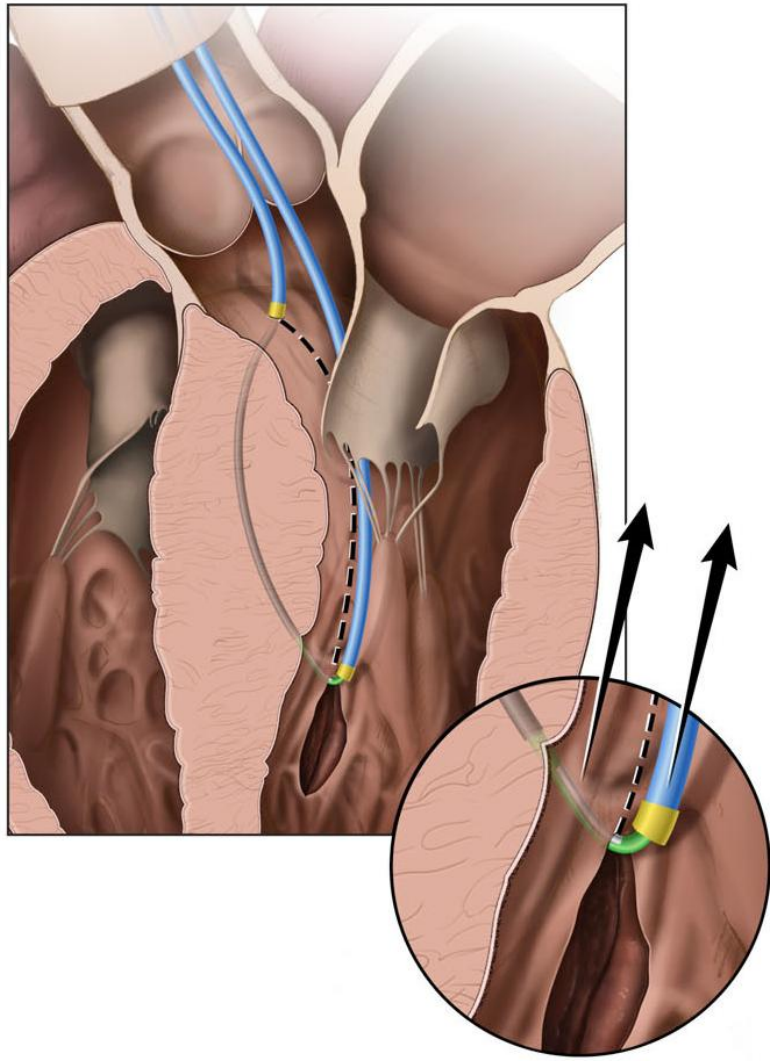


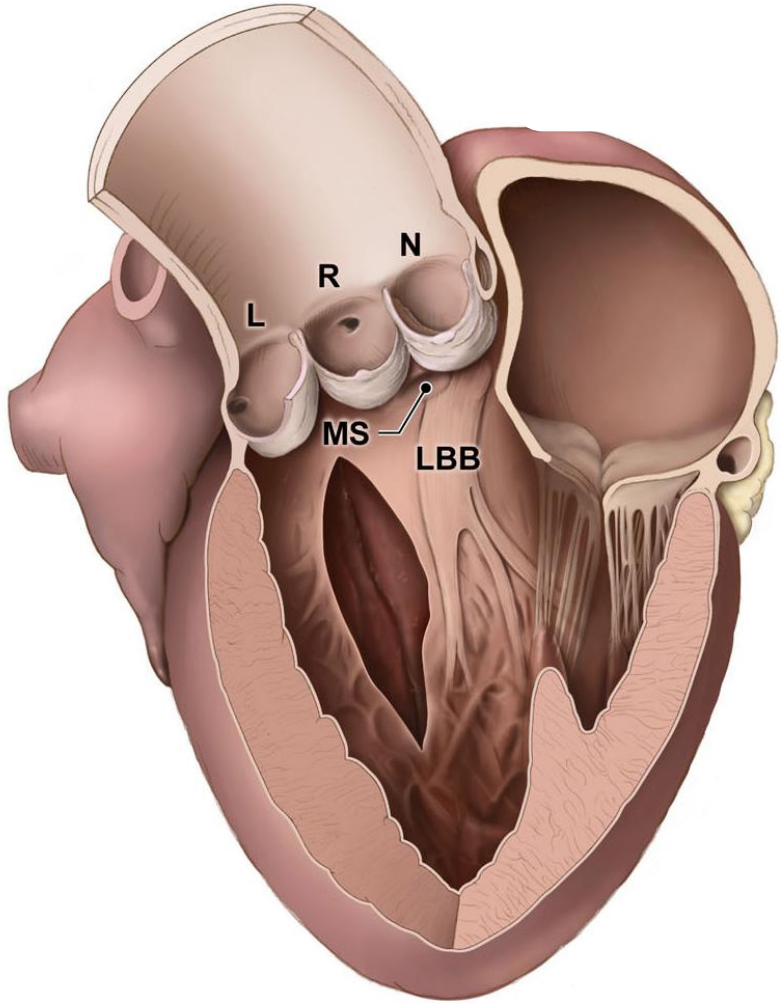
PTSMA


Patients undergoing ASA have similarly low long-term mortality and (aborted) sudden cardiac death rates compared with patients undergoing myectomy
AED
ASA and myectomy have comparable 30-day mortality rates
Septal coronary artery
Ethanol
Catheter
Alcohol volumes for ASA between 1.5 mL and 2.5 mL were found to be well balanced in terms of efficacy and safety for most patients
1/10 patients requires a permanent pacemaker following ASA compared with 1/25 following myectomy
1/13 ASA patients requires reintervention, 5x the risk following myectomy

SESAME – SEptal Scoring Along the Midline Endocardium

Greenbaum AB et al. Circ Cardiovasc Interv. 2022 Jun;15(6):e012106





Závěr

- obstrukce LVOT je jedno z nejdůležitějších témat TMVR
- máme poměrně širokou škálu možností řešení LVOTO
- většina je spíše experimentální
- potřebujeme standardizovanou a predikovatelnou metodu

Děkuji za pozornost