ČESKÁ ASOCIACE **INTERVENČNÍ KARDIOLOGIE**

# Interaktivní kasuistika: kdy SAVR?

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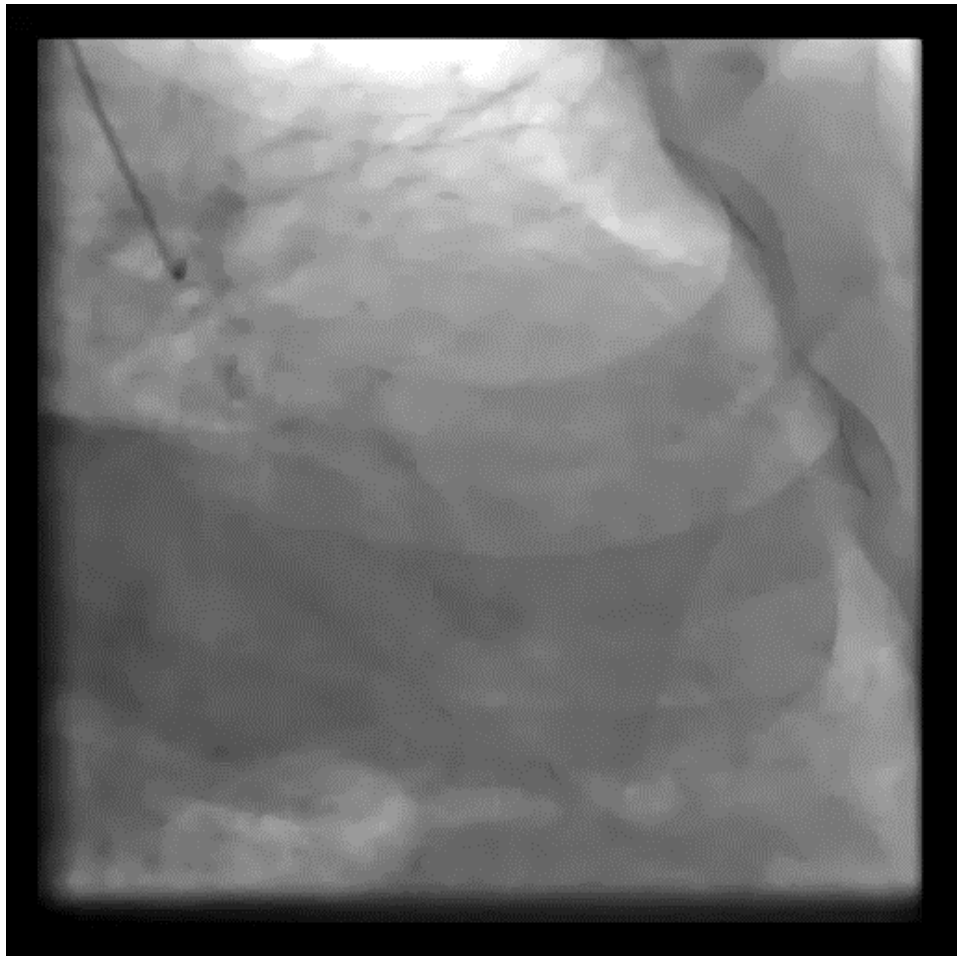
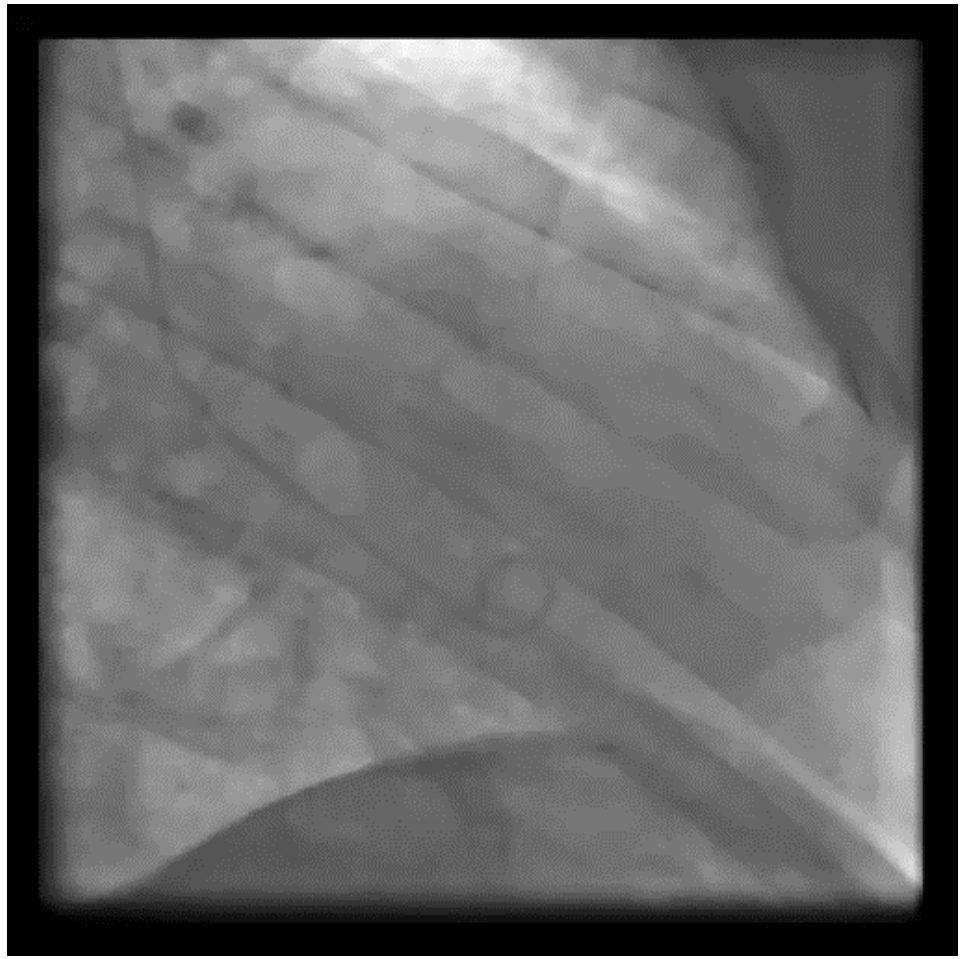
# Muž, 76 let

- 2018 – SKG, dobrá fce LK
- 2022 – dušnost NYHA II s progresí a oboustr. SS ad hospitalizace, FISI, EF LK 15%, Hb 113, CKD-EPI 0,94, bili 27
- Intersticiální plicní proces
- HLP, VCHGD v remisi, BHP, CHŽI, resekce feochromocytomu 2018, NIDDM
- Medik: furosemid, Verospiron, Xarelto 20mg, PAD
-

# 2018

FFR RIA 0,83

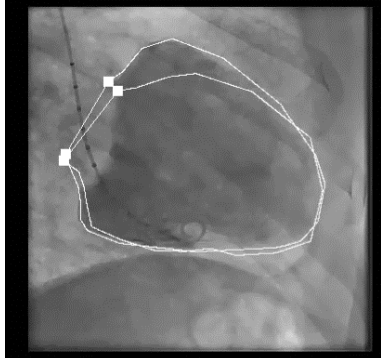




# 2022 – Co se přihodilo?

General

EF 22,53 %



| | Volume (ml) | Indexed (ml/m²) |
|---|---|---|
| EDV | 187,11 | 94,73 |
| ESV | 144,95 | 73,38 |
| SV | 42,16 | 21,35 |

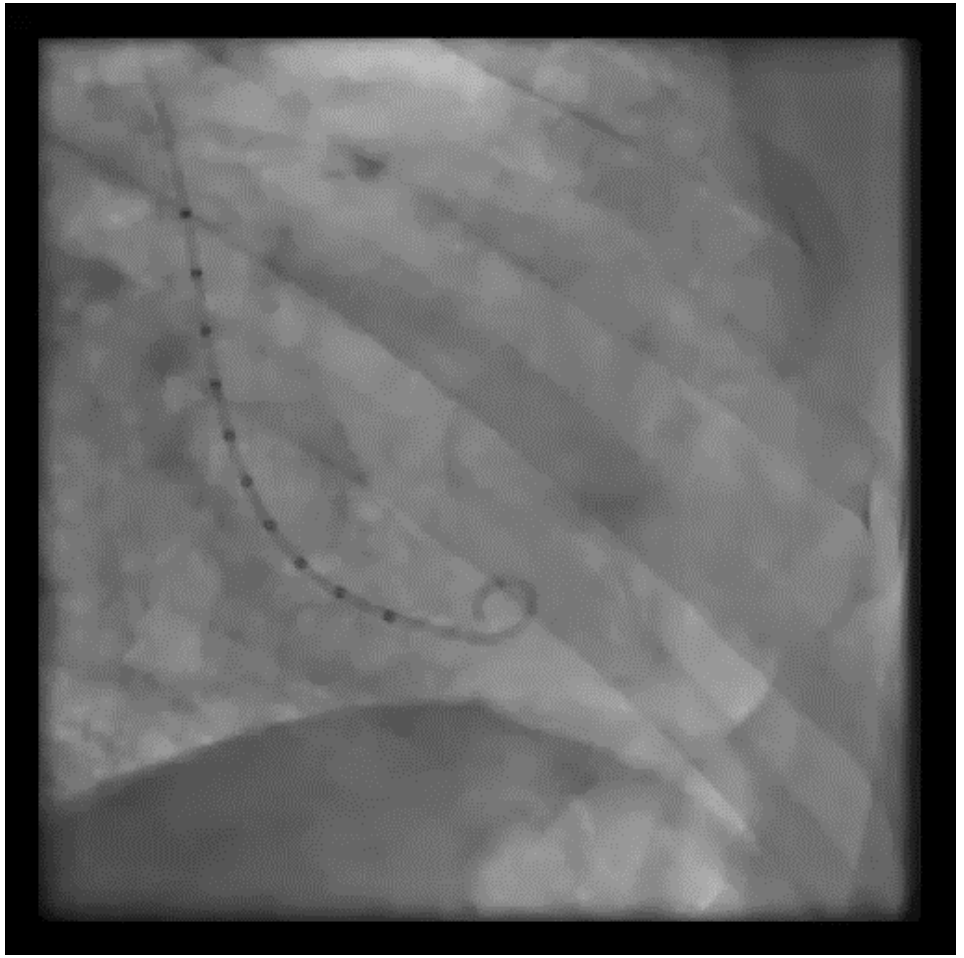
| | | |
|---|---|---|
| Cardiac output | (l/min) | - |
| Cardiac index | (l/min/m²) | - |

Wall

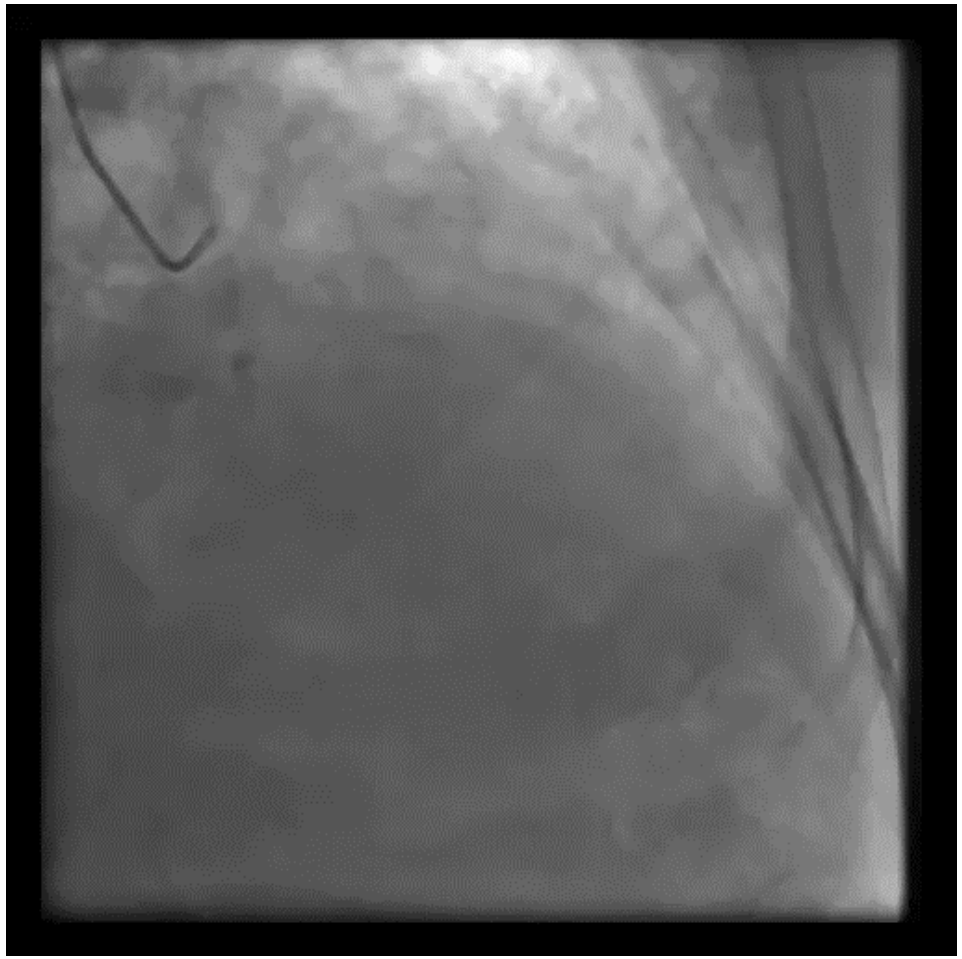
| | | |
|---|---|---|
| Wall thickness | - | (mm) |
| Wall volume | - | (ml) |
| Wall mass | - | (gr) |
| Wall stress | - | |

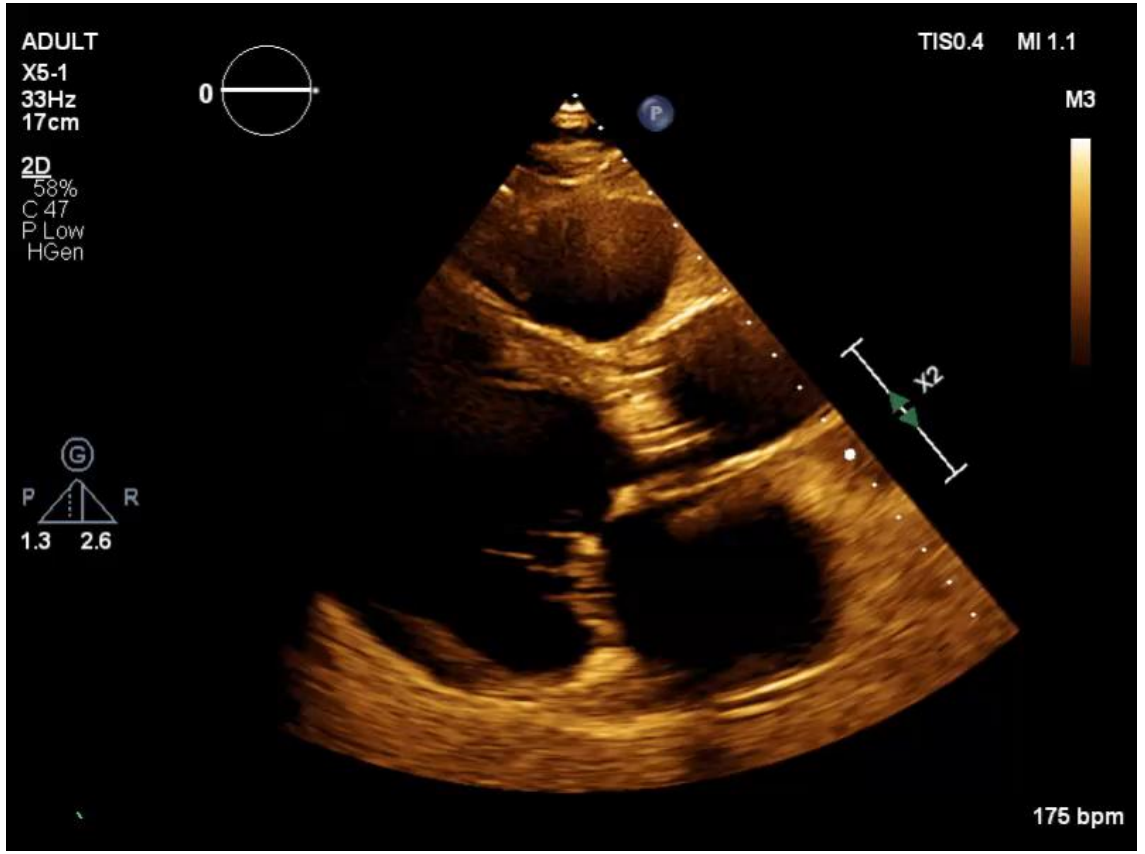
| | |
|---|---|
| Patient Name | Klimes Josef |
| ID | 460501/473 |
| Sex | Male |
| Birth Date | 1-5-1946 |
| Physician | Poloczek, Martin |
| Hospital | FN Brno |
| Acquisition Date | 12-9-2022 |
| Heart rate | - (bpm) |
| BSA | 1,98 (m²) |
| Index method | BSA |
| Study ID | 1 |
| Trial Name | |
| Run ID | 7 |
| Series Descr | Coro 2020 |
| ED Frame Nr. | 40 |
| ES Frame Nr. | 45 |
| Volume method | Area Length |
| EDV regression | x0,810+1,900 |
| ESV regression | x0,810+1,900 |
| RAO Cal Factor | 0,1277 (mm/pix) |
| Cal Object | 0,00 (mm) SiemensCal (TOD w/ ROI) |

Page 1/2

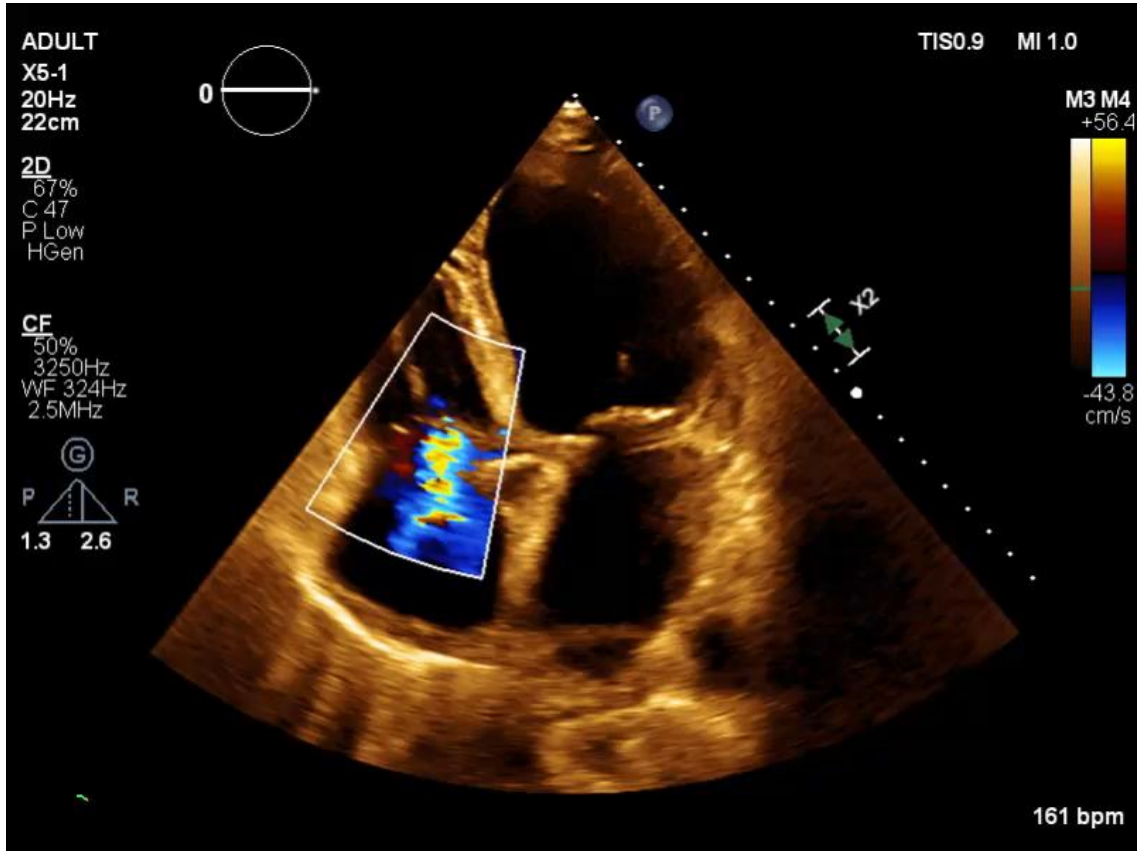


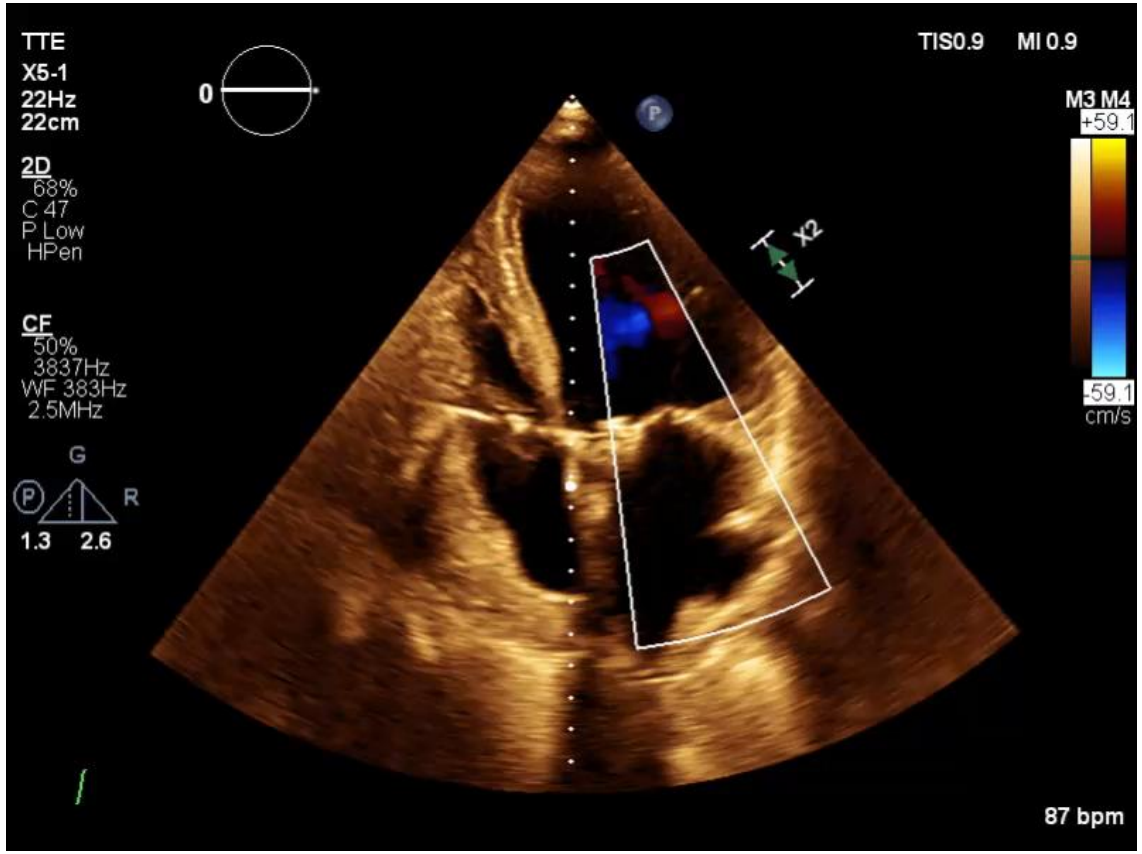
# 2022 – Co se přihodilo?
# SKG idem, ale významná AoS ☺



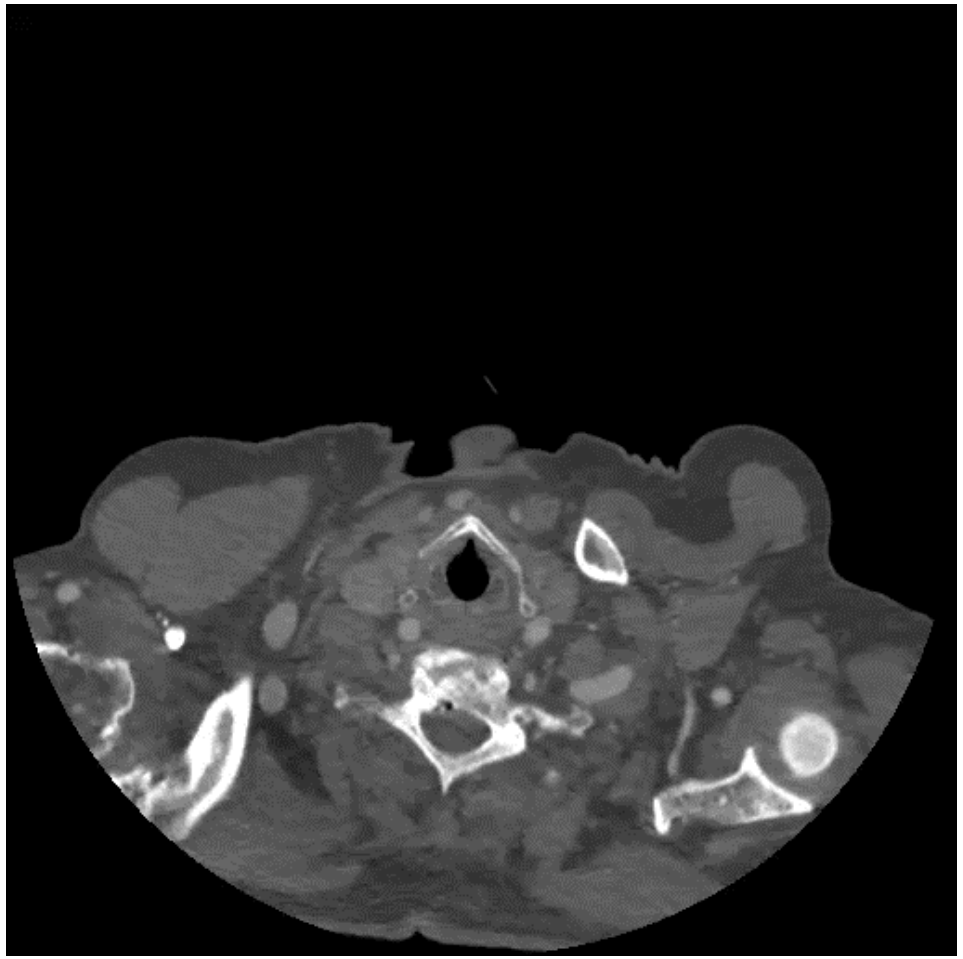


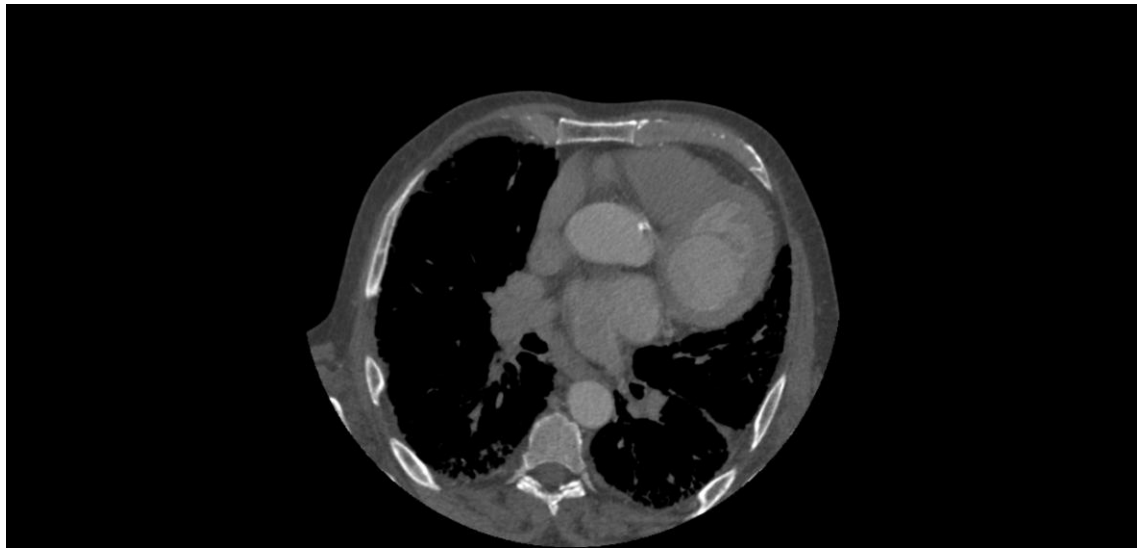
# TR 2-3, asymptomatické PFO



# Muž, 76 let s těžkou systolickou dysfcí a dosti komorbidit. [redacted]asná indikace k TAVI?





# 3mensio – indikace TAVI?

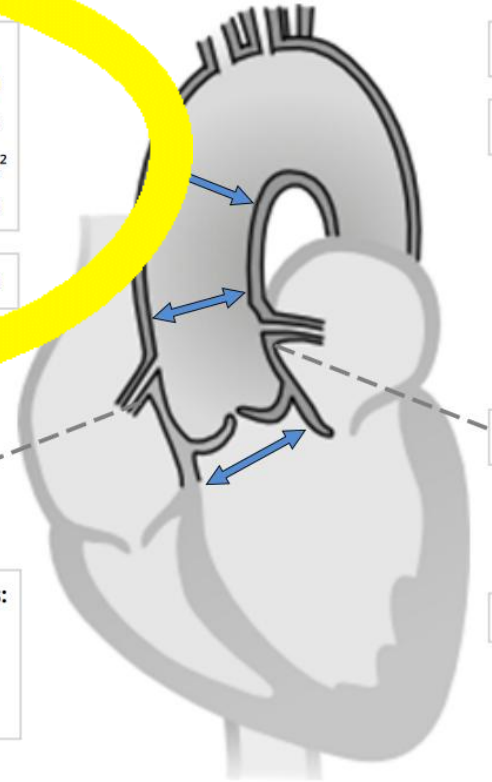
## Aortic Valve

**Phase:**

**Aortic Annulus**

| | |
|---|---|
| Perimeter: | 98,6 mm |
| Perimeter Derived Ø: | 31,4 mm |
| Area: | 752,0 mm² |
| Area Derived Ø: | 30,9 mm |

**LVOT Ø:** 34,2 mm



**Asc. Aorta Ø:** 38,4 mm

**STJ Ø:** 37,8 mm

**RCA Height:** 16,4 mm

**LCA Height:** 21,4 mm

**Sinus Of Valsalva Diameters:**

| | |
|---|---|
| Left: | 38,8 mm |
| Right: | 38,2 mm |
| Non: | 40,3 mm |

**Aortic Valve Calcification:** -

**Measurements:**

| | |
|---|---|
| Ascending Aorta Ø | Min: 37,4 mm<br>Max: 39,4 mm<br>Average: 38,4 mm |
| Aortic Annulus | Min Ø: 28,0 mm<br>Max Ø: 34,6 mm<br>Average Ø: 31,3 mm<br>Eccentricity: 0,19 |
| Sinus of Valsalva Height | 20,5 mm |
| Annulus to Apex | |
| Membranous Septum Length | |

| | |
|---|---|
| Sinotubular Junction Ø | Min: 36,5 mm<br>Max: 39,2 mm<br>Average: 37,8 mm |
| LVOT Ø | Min: 29,1 mm<br>Max: 39,3 mm<br>Average: 34,2 mm |
| Aorto-Mitral Continuity Length | |
| Valve to RCA | |
| Valve to LCA | |
| Valve to STJ | |

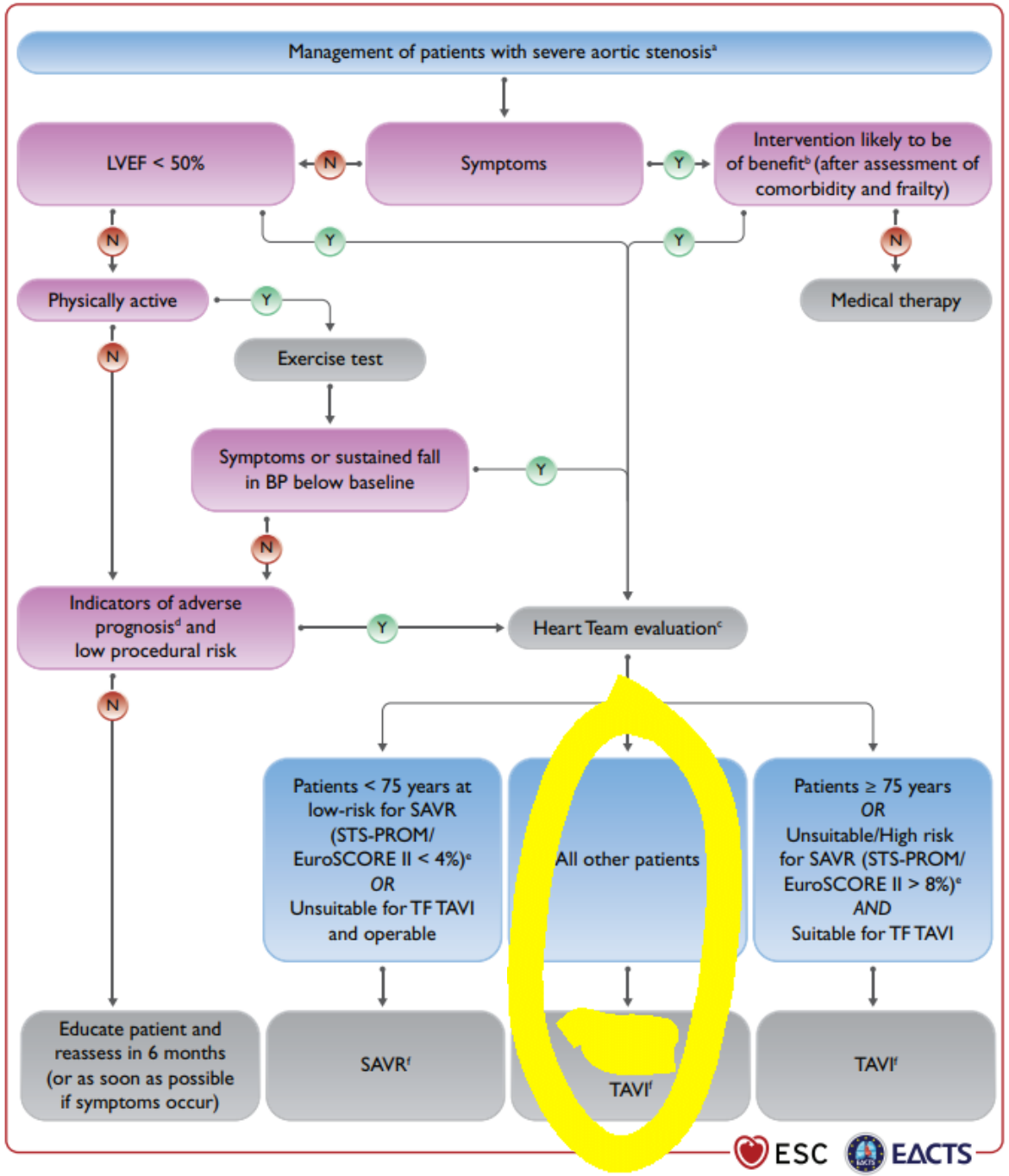
# ESC GL 2021

**Table 6 Clinical, anatomical and procedural factors that influence the choice of treatment modality for an individual patient**

| | Favours TAVI | Favours SAVR |
|---|---|---|
| **Clinical characteristics** | | |
| Lower surgical risk | – | + |
| [redacted] | + | – |
| Younger age[a] | – | + |
| [redacted] | + | – |
| Previous cardiac surgery (particularly intact coronary artery bypass grafts at risk of injury during repeat sternotomy) | + | – |
| Severe frailty[b] | + | – |
| Active or suspected endocarditis | – | + |
| **Anatomical and procedural factors** | | |
| TAVI feasible via transfemoral approach | + | – |
| Transfemoral access challenging or impossible and SAVR feasible | – | + |
| Transfemoral access challenging or impossible and SAVR inadvisable | +[c] | – |
| Sequelae of chest radiation | + | – |
| Porcelain aorta | + | – |
| High likelihood of severe patient–prosthesis mismatch (AVA <0.65 $cm^2/m^2$ BSA) | + | – |
| Severe chest deformation or scoliosis | + | – |
| [redacted] | – | + |
| Bicuspid aortic valve | – | + |
| Valve morphology unfavourable for TAVI (e.g. high risk of coronary obstruction due to low coronary ostia or heavy leaflet/LVOT calcification) | – | + |
| Thrombus in aorta or LV | – | + |

| Concomitant cardiac conditions requiring intervention | | |
|---|---|---|
| Significant multi-vessel CAD requiring surgical revascularization[d] | – | + |
| Severe primary mitral valve disease | – | + |
| Severe tricuspid valve disease | – | + |
| Significant dilatation/aneurysm of the aortic root and/or ascending aorta | – | + |
| Septal hypertrophy requiring myectomy | – | + |





# …Ao anulus nadhraniční pro TAVI, takže SAVR

- OPERACE na CKTCH: dne 23.11.2022 provedena v ECC náhrada aortální chlopně bioprotézou - AVR bio (EL Perimount 27), anuloplastika trikuspidální chlopně - TVP anuloplastika (ring EL Physio tricuspid 32), uzávěr foramen ovale apertum, sutura vena jugularis interna l. dx. pro malpozici HD kanyly.

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# Děkuji za pozornost