



FAKULTNÍ NEMOCNICE®
OLOMOUC



Lékařská
fakulta

Univerzita Palackého
v Olomouci



KOMPLEXNÍ
KARDIOVASKULÁRNÍ CENTRUM
FAKULTNÍ NEMOCNICE OLOMOUC

URGENTNÍ MANAGEMENT KARDIOGENNÍHO ŠOKU U PACIENTA S AORTÁLNÍ STENÓZOU

M Sluka / Heart Team FN Olomouc

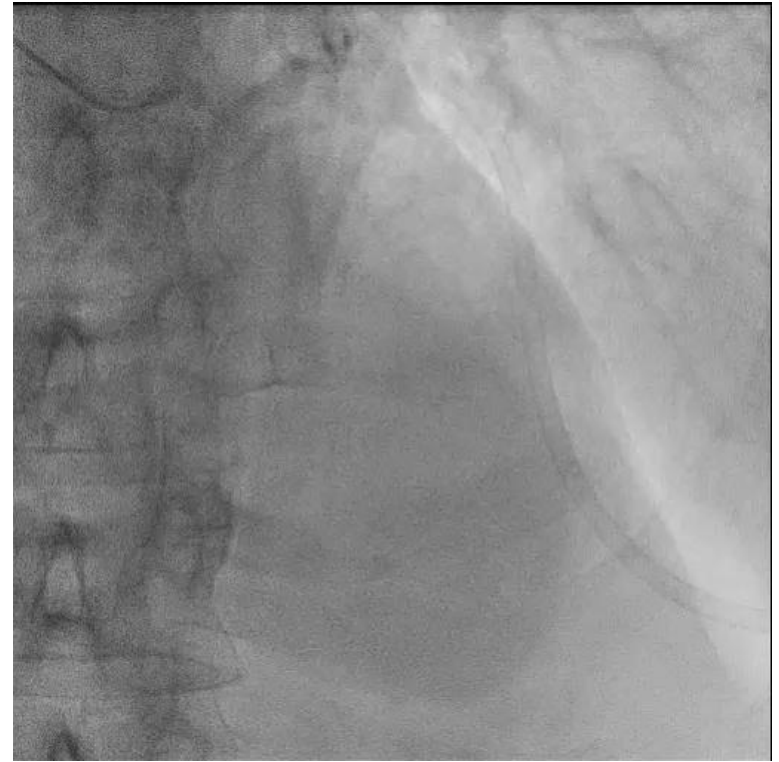
Anamnéza

- Muž, 74 let, učitel ve SD
- 184 cm, 75 kg, BMI 22,2
- Art. hypertenze, HLP, ICHDKK
- Kuřák
- Přijat pro edém plic, cTn 89...5580
- EKG: ST deprese inferolaterálně
- TTE: hypokinéza apikoseptálně, hy LK 13-14 mm, EF LK 50%

Anamnéza

- Přechodné zlepšení po diuretické terapii, následované oběhovým zhroucením, intubace, UPV, kombinovaná katecholaminová podpora, oligurie
- Překlad FN Olomouc D2 11:48
- Bedside ECHO: EF LK 35% při difuzní hypokinéze dilatované LK, kritická Ao stenosa, PG 110/74 mmHg

SKG D2 14:15



SKG D2 14:15



Průběh

- STK 100-120 mmHg na kombinaci NOAD + DOB
- UPV ($pO_2 \approx 12$, $pCO_2 \approx 4,8$, $pH \approx 7,44$, laktát $\approx 1,5$)
- Oligurie
- Urea 14,3, kreat 150, \uparrow transamináz, BNP >35000, CRP 33,4, leu 18,3, Hgb 145, PLT 184

Strategie

EuroSCORE II

50.44 %



Based on the information you have provided... if 100 people with a similar condition had a similar operation, 50 to 51 may be expect to die, whereas 49 to 50 would be expected to survive. Your EuroSCORE is 50.44.

Procedure Type: **Isolated AVR**

PERIOPERATIVE OUTCOME	ESTIMATE %
Operative Mortality	31.5%
Morbidity & Mortality	86.6%
Stroke	9.28%
Renal Failure	18.2%
Reoperation	9.2%
Prolonged Ventilation	75.5%
Deep Sternal Wound Infection	0.054%
Long Hospital Stay (>14 days)	34.7%
Short Hospital Stay (<6 days)*	3.06%

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TAVI

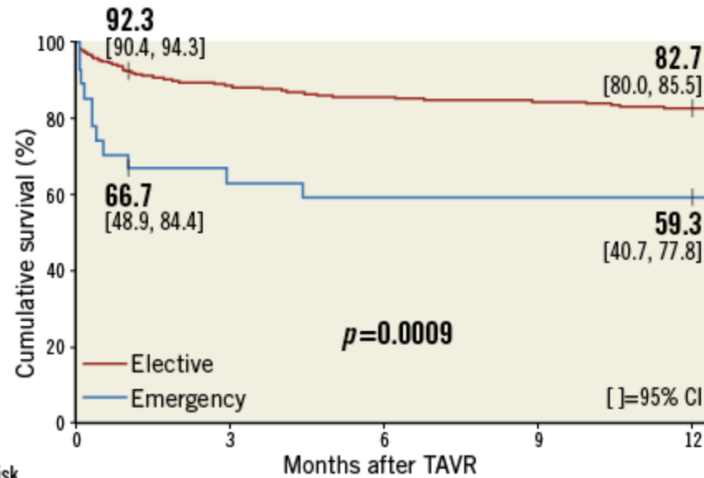
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TAVI při kardiogenním šoku

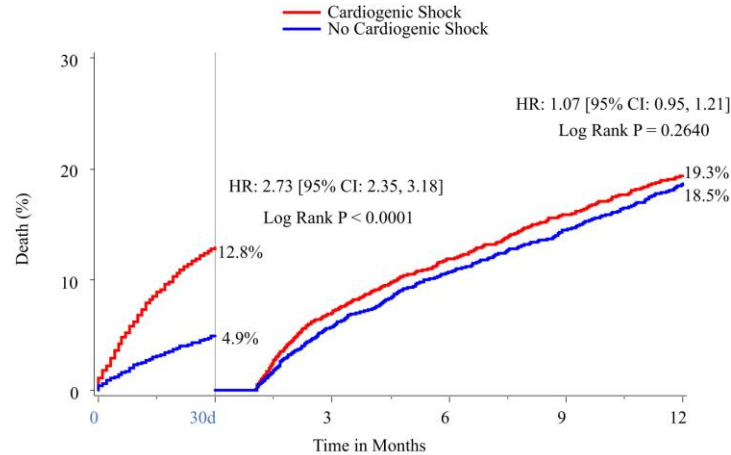
„TAVI má být zvážena jako racionální rescue terapie u pacientů v kardiogenním šoku v důsledku dekompenzované aortální stenózy“



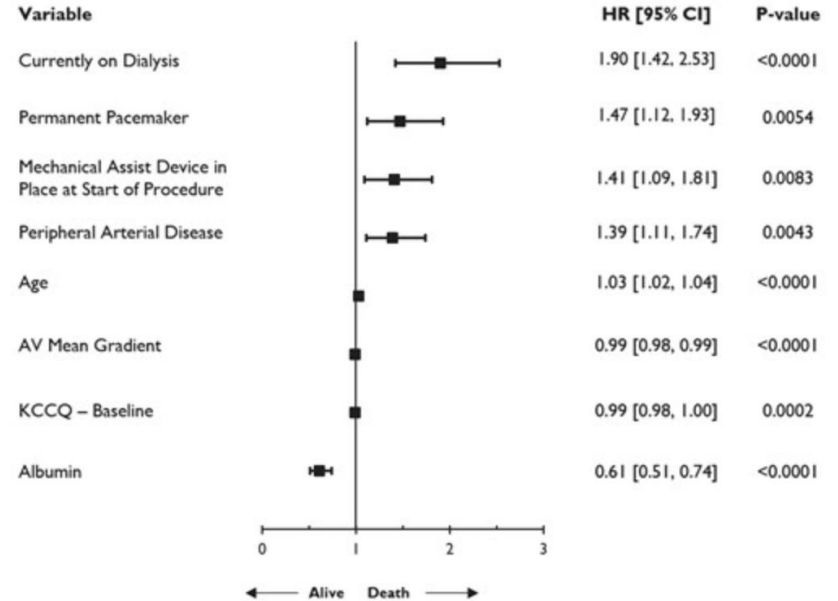
Patients at risk

Elective	729	673	644	623	596	532
Emergency	27	18	17	16	16	14

TAVI při kardiogenním šoku



Number at Risk		30d	3	6	9	12
Cardiogenic Shock	4,952	3,794	2,400	2,233	2,111	1,468
No Cardiogenic Shock	4,952	4,182	2,845	2,668	2,533	1,766



Strategie

EuroSCORE II

50.44 %

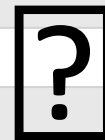


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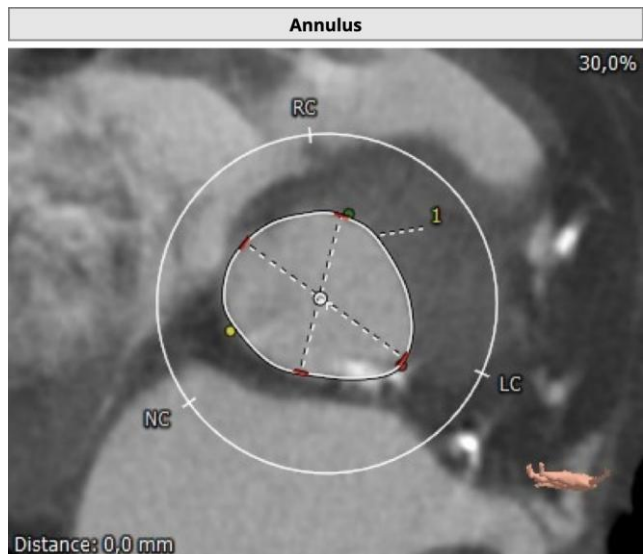
Emergency
TAVI!!!

Procedure Type: **Isolated AVR**

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CTAg D2 18:44

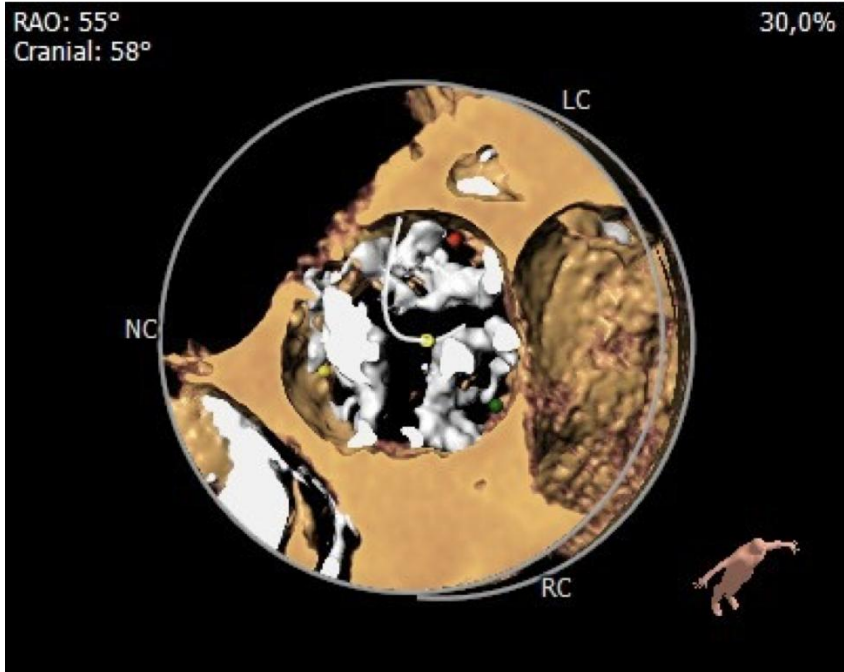


- ACS 15,8 mm
- ACD 21,2 mm
- SOV: 32,0 - 34,2 mm
- STJ: 28,8 mm

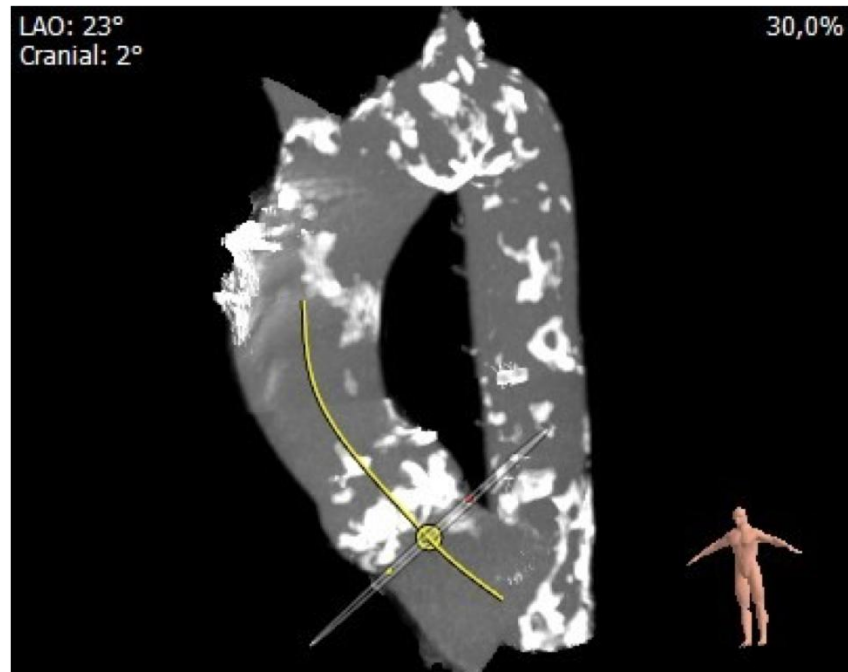
ID	Type	Label	Value
1	Polygon	Annulus Dimensions - Min. Ø	23,8 mm
		Annulus Dimensions - Max. Ø	28,9 mm
		Annulus Dimensions - Avg. Ø	26,3 mm
		Annulus Dimensions - Area derived Ø	25,8 mm
		Annulus Dimensions - Perimeter derived Ø	26,3 mm
		Annulus Dimensions - Area	524,6 mm ²
		Annulus Dimensions - Perimeter	82,5 mm

CTAg D2 18:44

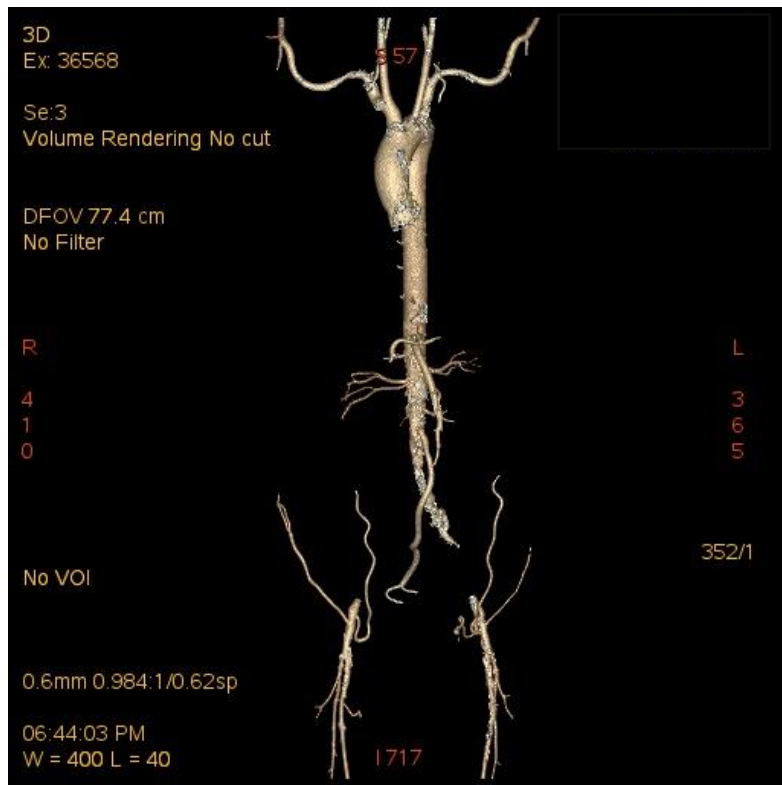
Hockey Puck (VR)



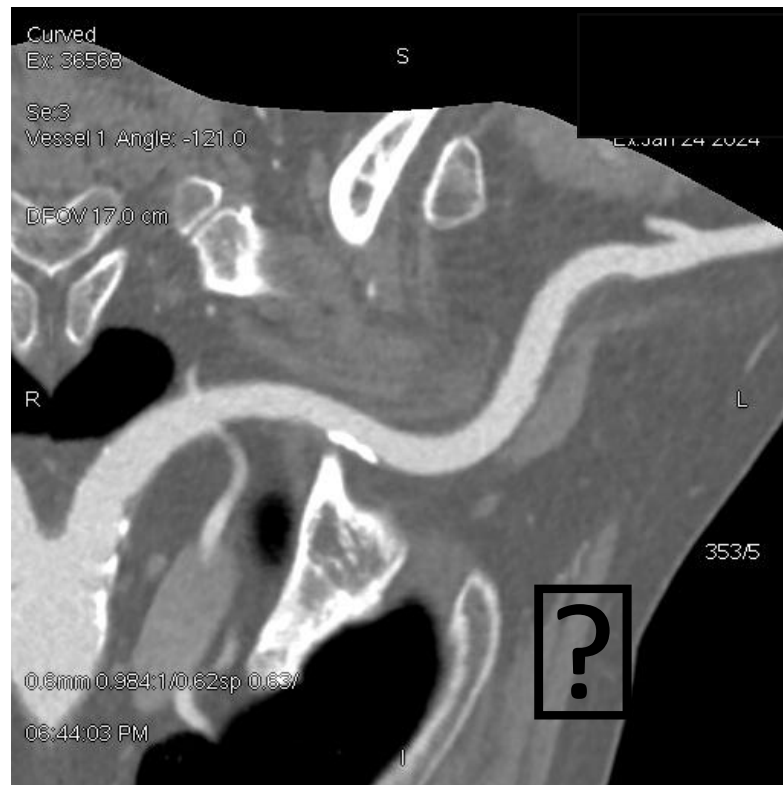
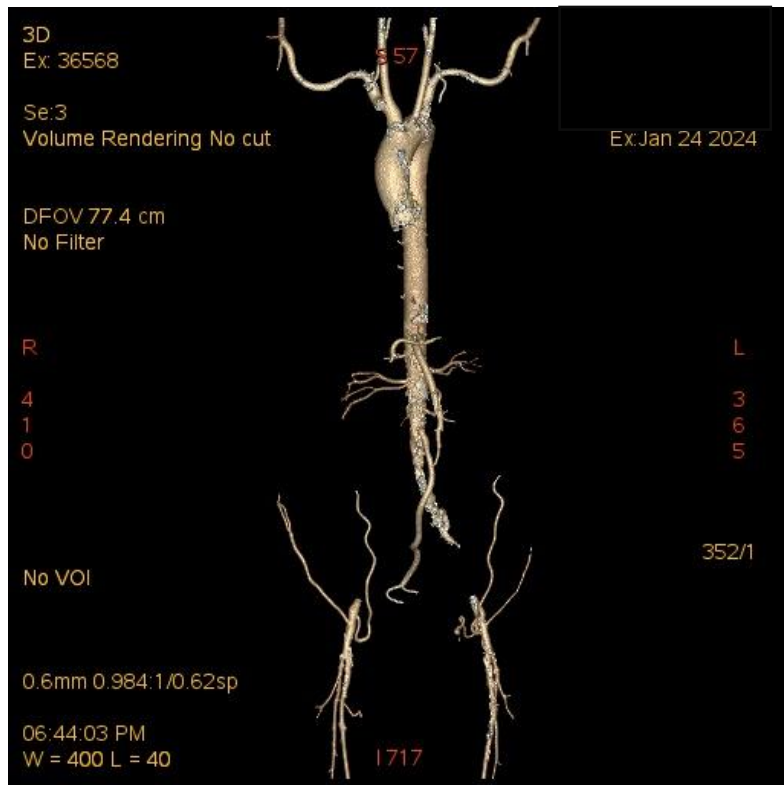
Calcifications



CTAg D2 18:44

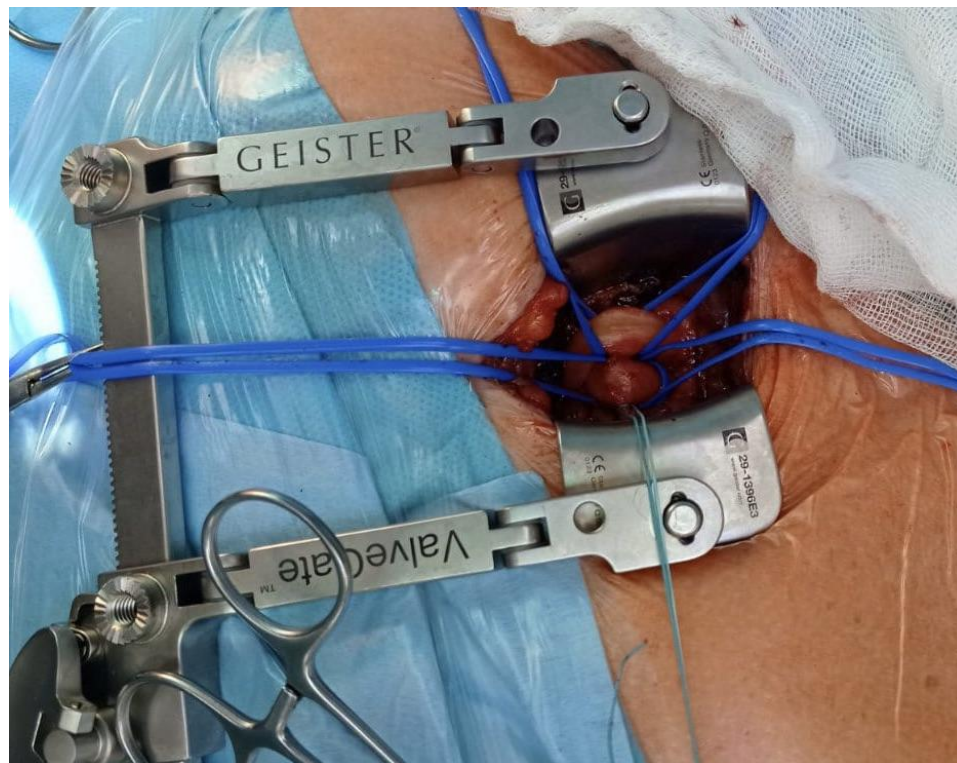


CTAg D2 18:44

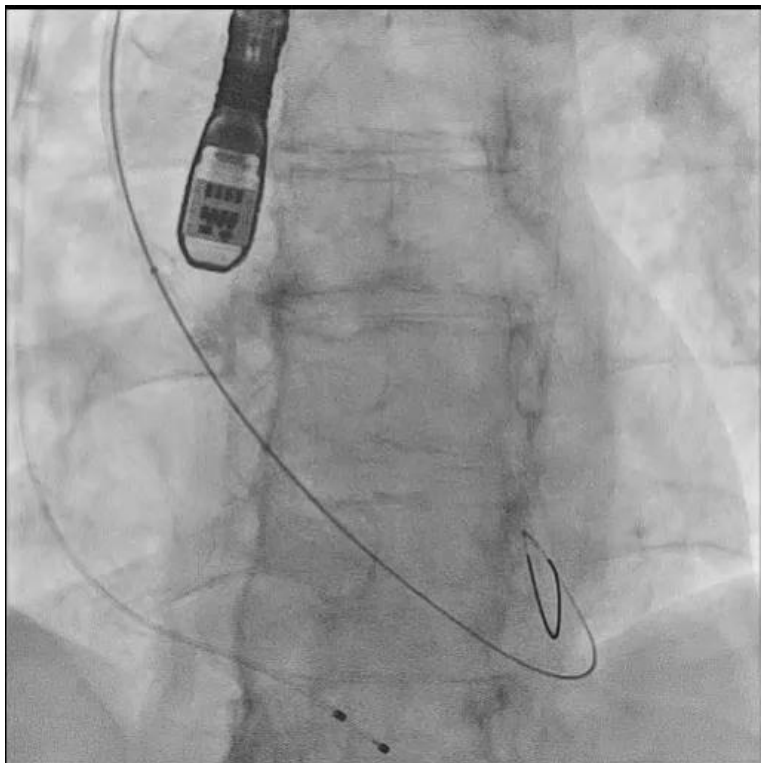


Strategie

- TAVI a. axillaris l.sin
- Chirurgický přístup
- Celková anestezie
- TEE guidance
- Sapien3 26

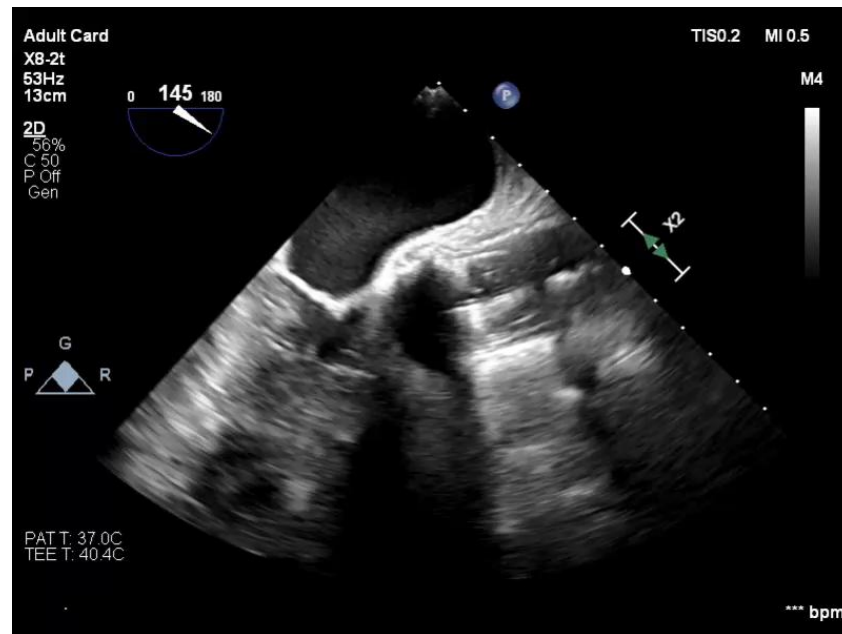
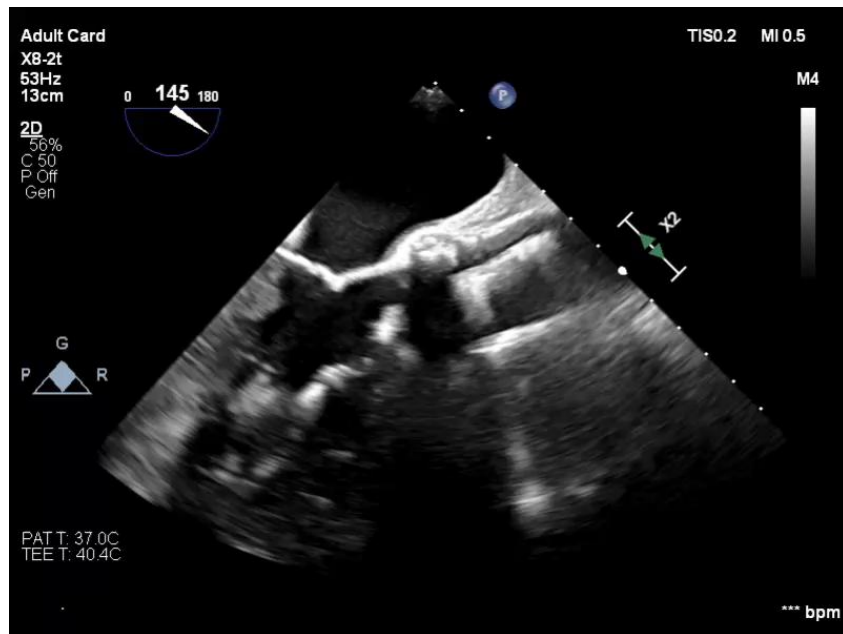


TAVI D3 9:33

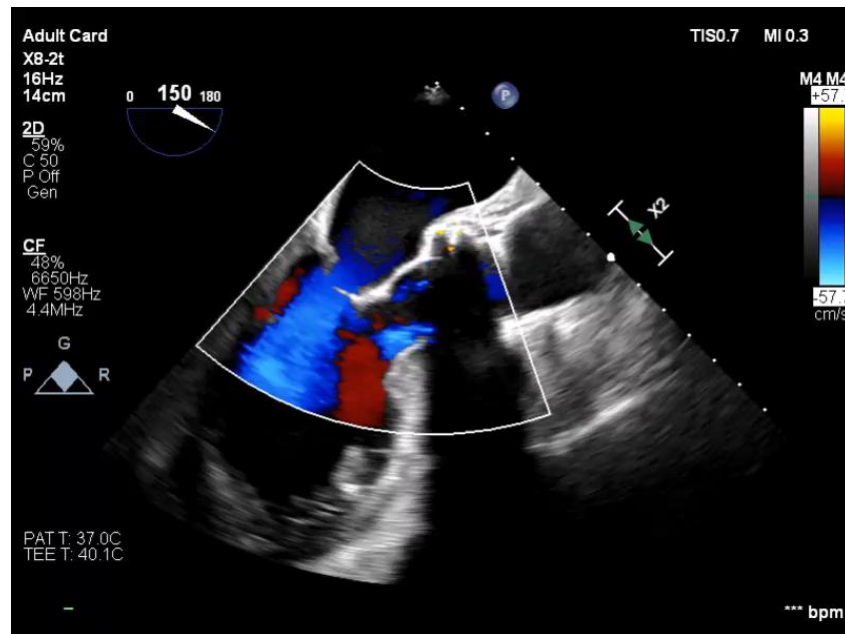
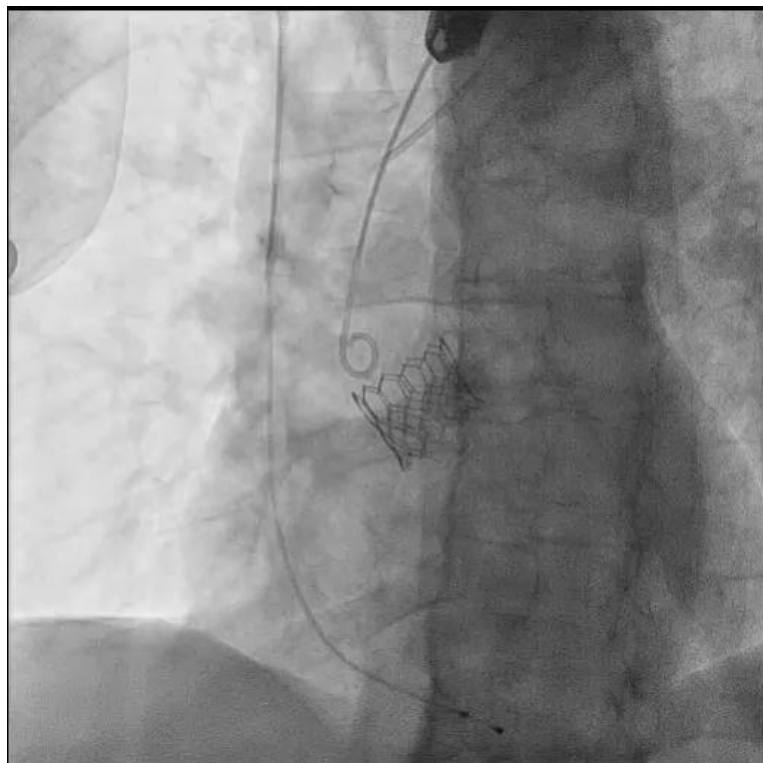


- Lunderquist DC™ wire
- PreBAV

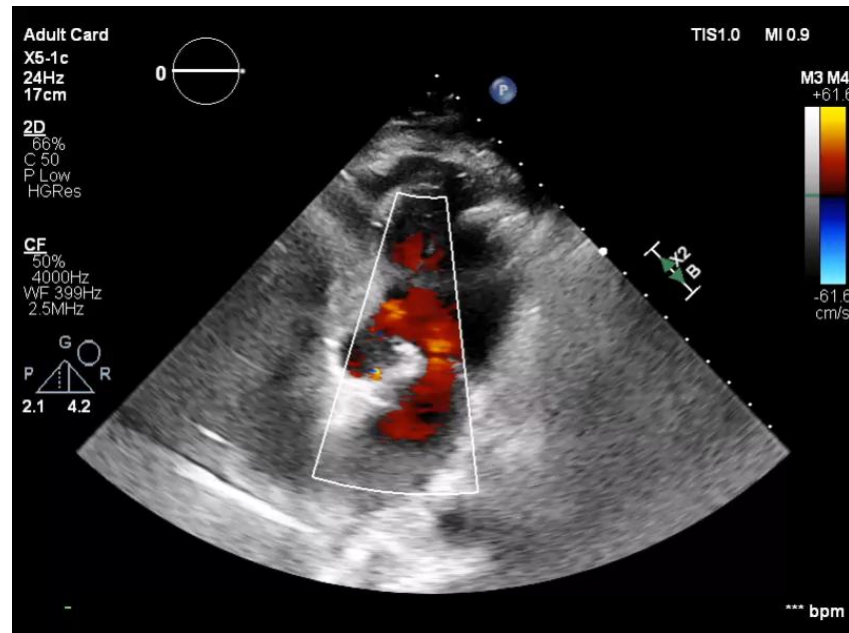
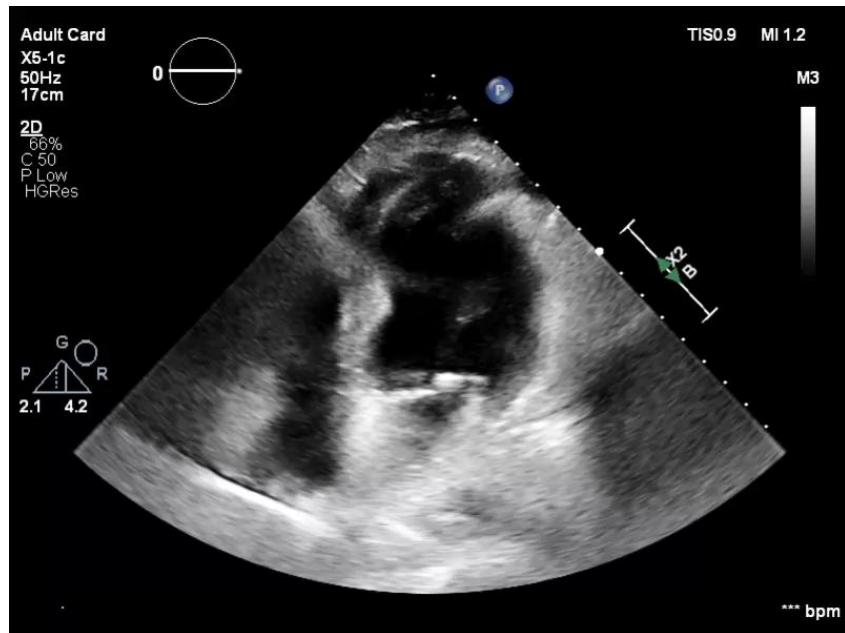
TAVI D3 9:33



TAVI D3 9:33



TTE D9



Průběh

- Vysazení katecholaminů, extubace D4
- Pokračující ATB terapie
- Urea 8,4, kreat 77, normalizace transamináz, CRP 20,6, leu 10,3, Hgb 110, PLT 211
- TTE: EF LK 50%, PG 10/6 mmHg, PVL nevýznamný
- Propuštěn domů D10



30d f-up

- Asymptomatický
- Běžné aktivity bez limitací
- TTE: EF LK 60%, PG 5/3 mmHg, PVL 0
- Stále kouří 4-5 cig/den
- 90d f-up odmítá: „ nemá čas na cestování..., půjdu na kontrolu tady....“



Take home message

- TAVI je bezpečnou a efektivní terapií aortální stenózy i u pacientů prezentujících se s kardiogenním šokem
- V případě přežití prvních 30 dní se jejich mortalita neliší od standardní TAVI populace

- Volba optimální technologie
- Správný timing výkonu
- Široce kooperující a plně erudovaný TAVI tým





DĚKUJI ZA POZORNOST

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