

WORST NIGHTMARE - TRANSCATHETER MITRAL VALVE IN VALVE

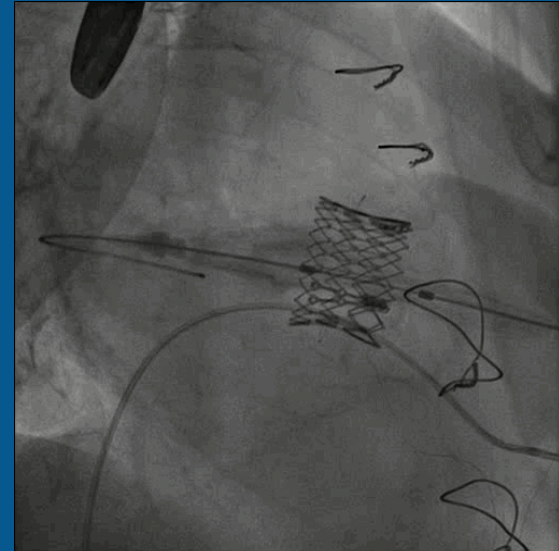
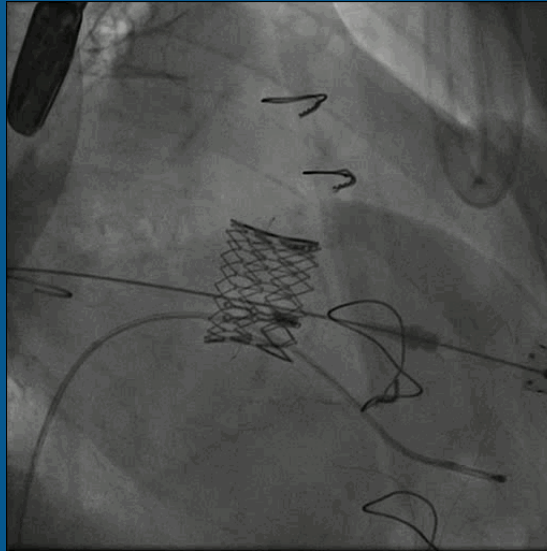
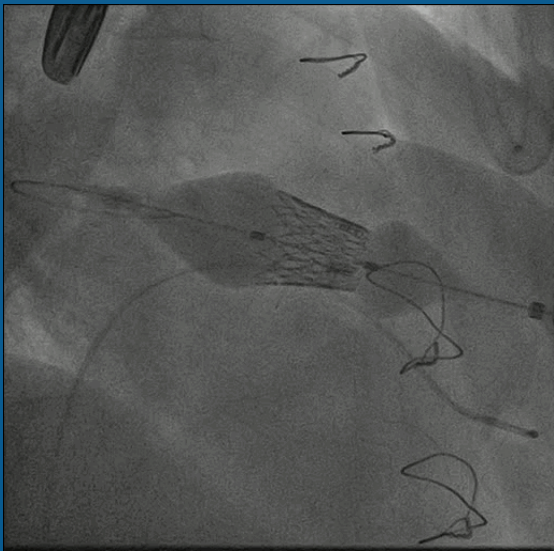
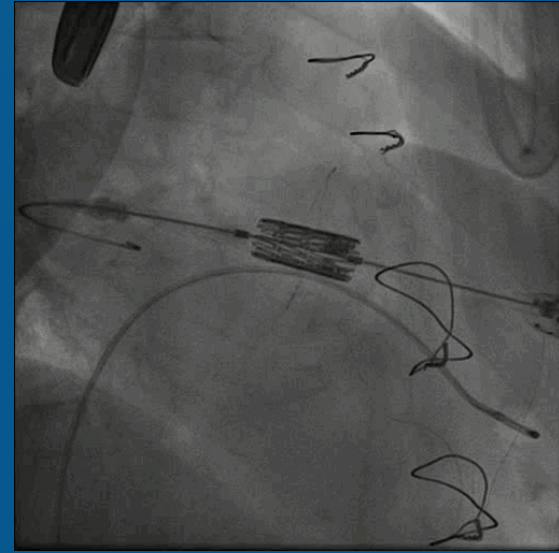
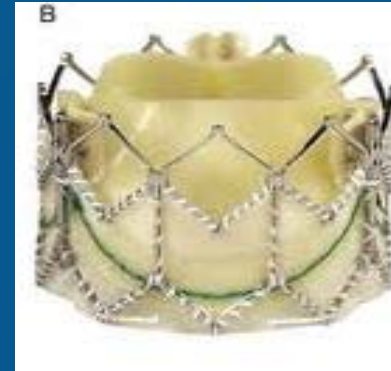
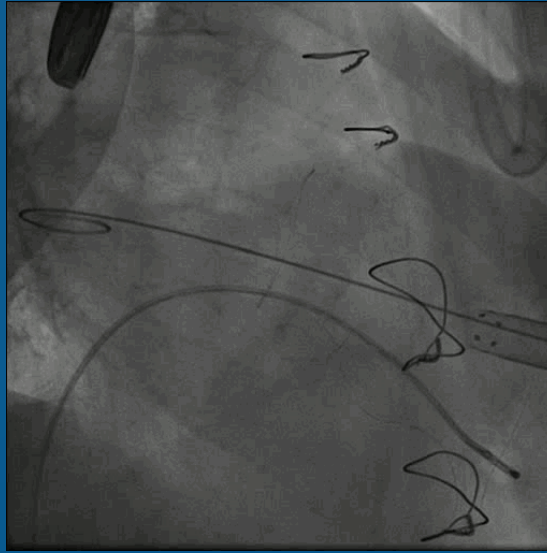
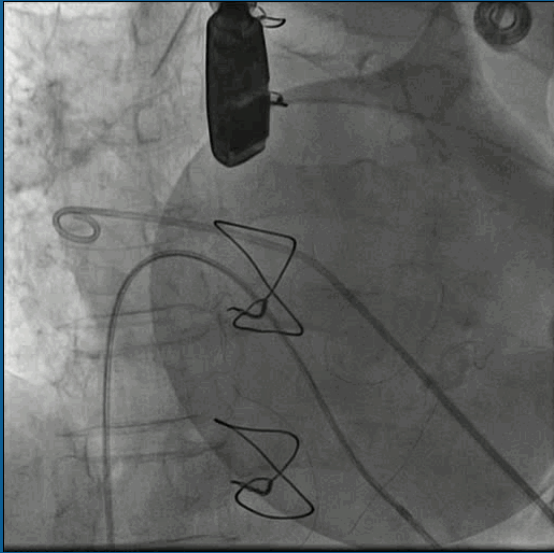
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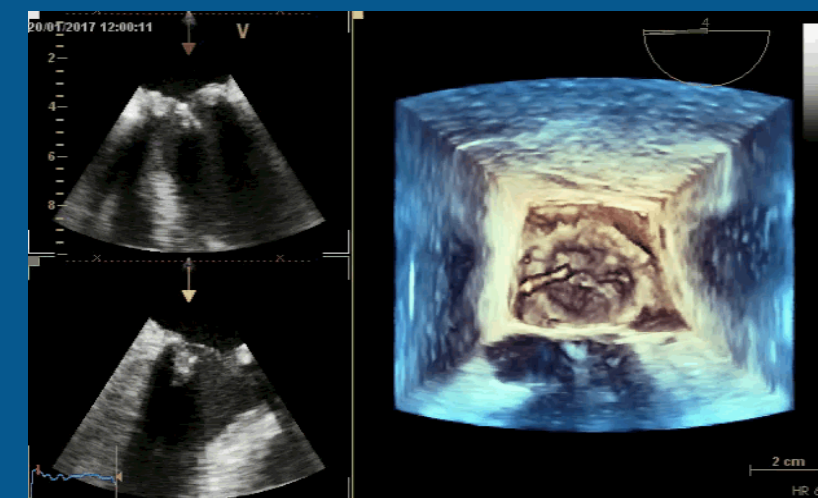
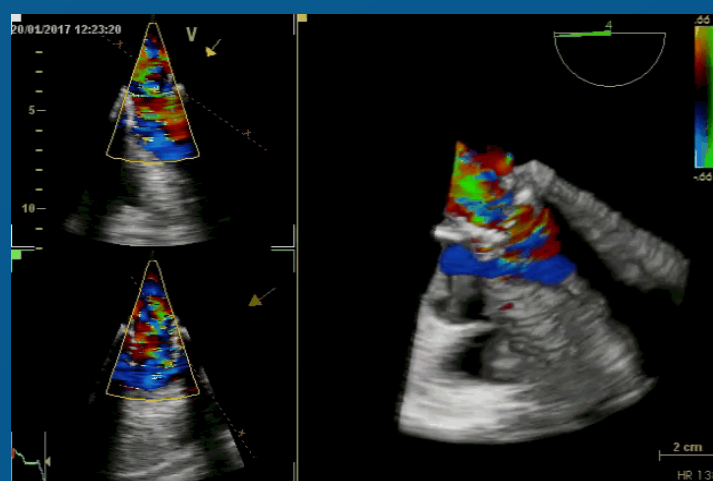
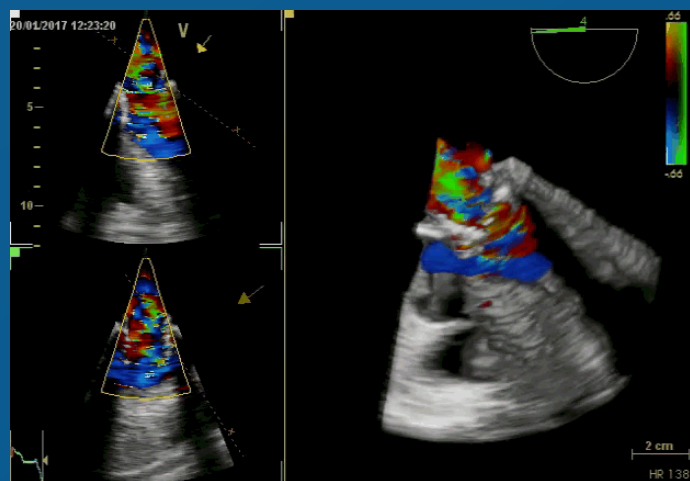
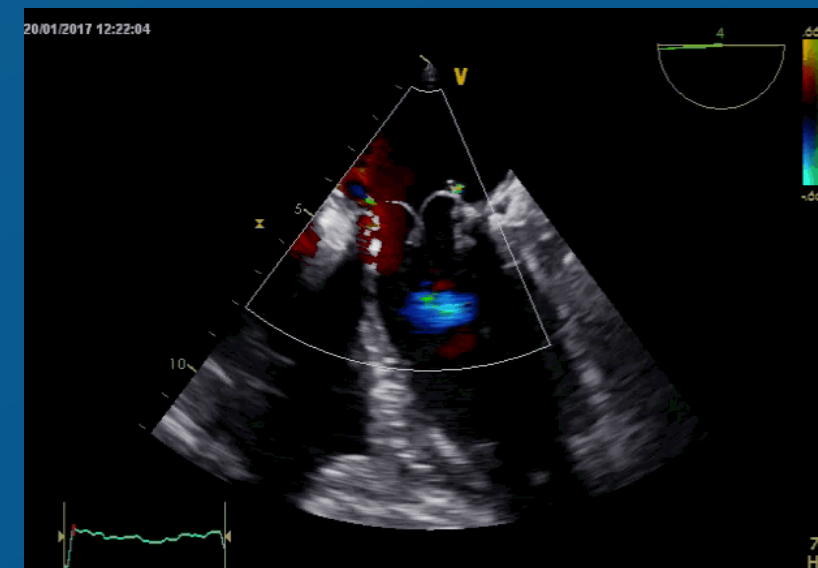
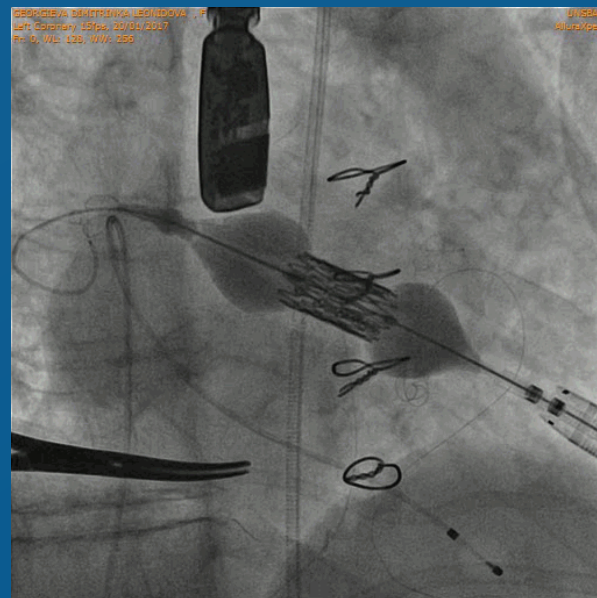
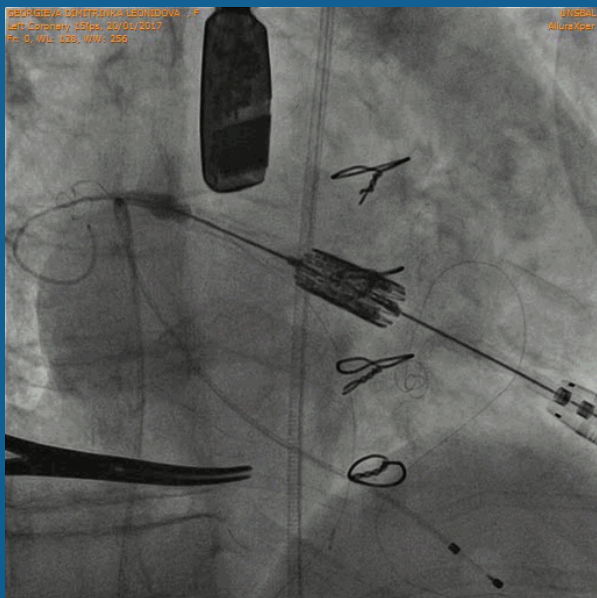
- ✓ Redo cases in mitral position is still challenge especially in cohort of elderly patients/pts/ will a lot of comorbidities.
- ✓ Transcatheter aortic valve prosthesis in mitral position as "valve in valve procedure" is a good option for these pts and with suitable selection operative mortality is low, and the survival rate is good.

- From 2009 to August 2017 a total number of 152 patients underwent transcatheter valve implantation: 144 with standard TAVI, 3 “valve in valve” in aortic position and 5 “valve in valve” in mitral position.
- The five mitral pts are survived mitral valve surgery
- [MVR-biological (4 - Sorin Pericarbon; 1 – Vascutek-Aspire)] in the past.
- All pts suffered from severe mitral stenosis, mitral regurgitation II -III and many others comorbidities.
- Three of pts were NYHA class III and two - class IV.
- Left ventricular ejection fraction (LVEF) less than 35 % we found in 2 pts, the rest three - between 35-70%.
- Peak mitral gradients were between 16-24(20)mmHg and mean gradients -5-12(8)mmHg.
- Mean STS score was 24,98, mean
- Logistic Euro score – 25,8 and STS 24,5%.

- All five pts were treated using a transapical approach with left thoracotomy in 5th intercostal space;
- They refused conventional surgery with CPB, because of many comorbidities and accept this new and less traumatic method;
- The prosthesis of choice were Edwards Sapien(A) & Sapien XT(B)
- ▶ Positioning and valve implantation in four of pts was made fluoroscopic;



- ▶ In one patient the ring of mitral prosthesis (Aspire) was invisible fluoroscopic and procedure was done by 3D Echo!



This case was a terrible nightmare for us, but we found a new way – 3D Echo approach in positioning and deploying of the valve !!!

- ▶ All 5 replacements were successful without any conversion to conventional MVR using CPB.
- ▶ In early postoperative period we didn't find any complication except one patient with acute renal failure who needs CVVH for 3 days.
- ▶ ICU stay 1-4 days, hospital stay 5-8 days.
- ▶ We couldn't find post-procedural any valve regurgitation.
- ▶ All five pts survived procedure and was discharged.
- ▶ 3months, 6 months and 1 year follow up show low gradients absence of new mitral regurgitation and improving NYHA functional class.
- ▶ Our experience shows that transcatheter valve is a reasonable approach for management of severe prosthetic mitral stenosis with low morbidity and zero mortality.
- ▶ This approach could be recommended as optimal treating strategy for high-risk pts with degenerative and structural changes in biological mitral prosthesis.