Again prior to 3rd procedure O2 saturation dropped to 88%. Then after the deployment of 2 Vascular Amplatzer plugs in lower and mid lobe respectively, the O2 saturation became 100% and synosis fully disappeared even after exercise.

TCTAP C-218
Transcatheter Closure of Mitral Paravalvular Leak via Retrograde Approach Without an Arteriovenous Loop
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[CLINICAL INFORMATION]
Patient initials or identifier number. 18224033
Relevant clinical history and physical exam. 68-year-old gentleman Chief complaint: progressive worsening of dyspnea on exertion for 5 months (NYHA functional class II-III) Past history: mitral valve prolapse with infective endocarditis and severe mitral regurgitation s/p mitral valve replacement (Edwards pericardial valve 29 mm) 2 years ago. Physical examination: regular heart beat, S1 S2 S3-S4-, grade 3/6 pansystolic murmur over apex, no peripheral pitting edema.
Relevant test results prior to catheterization. Preserved LV & RV systolic function. Thickened aortic valve with mild AR. Bioprosthetic mitral valve with severe paravalvular leak: 4 mmHg MPG, 16 mmHg PPG, MVA = 2.4 cm² by PHT. Oval shape defect about 4-5 mm at mitral-aortic fibrous continuity Mild to moderate TR, RVSP = 45 mmHg Mild PR.

[INTERVENTIONAL MANAGEMENT]
Procedural step.
1. Retrograde approach via common femoral artery
2. Under the guidance of fluoroscopy and TEE, 0.025” guidewire passed through the mitral paravalvular leak but 6F JR4 guiding catheter failed.
3. With the support of double wires and mother-in-child catheter, 5F multipurpose guiding catheter passed through the mitral paravalvular leak and then 6F JR4 guiding catheter passed through the mitral paravalvular leak.
4. We selected 6mm/4mm Amplatzer ductal occluder II (AGA Medical Corp, Plymouth, MN, USA) to plug the leak.
5. Amplatzer ductal occluder II was deployed and only mild residual leak was detected by TEE.
Case Summary. Although surgical repair or replacement is the gold standard for treatment of prosthetic paravalvular leakage, it carries a high morbidity and mortality risk, and some patients are poor surgical candidates. The percutaneous closure of such defects is an attractive alternative to surgery, and different devices are being used for this purpose. Afemorofemoral wire loop is usually constructed to deliver the closure device. In our case, a prosthetic mitral paravalvular leak was successfully closed with use of the Amplatzer® Duct Occluder II, via retrograde approach under the guidance of fluoroscopy and trans esophageal echocardiography, without the use of a wire loop.