

Henry Ford Health System

Henry Ford Health System Scholarly Commons

Cardiology Meeting Abstracts

Cardiology/Cardiovascular Research

4-2021

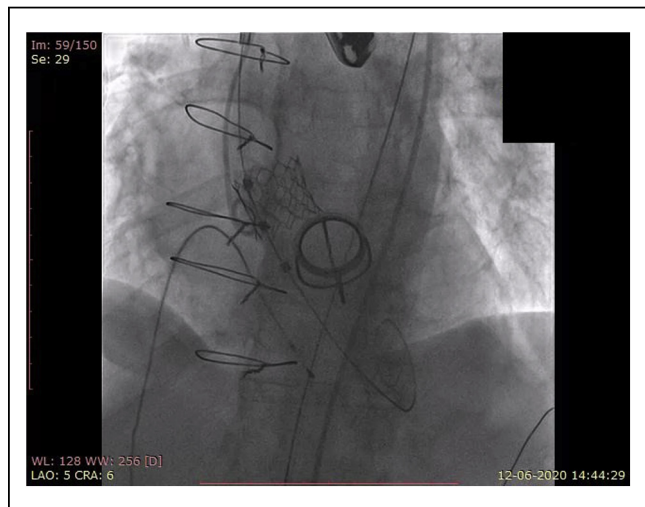
Chase the Leak - A Case of Valve-in-Ring with Mitral PVL Closure

Chak-Yu So

Guson Kang

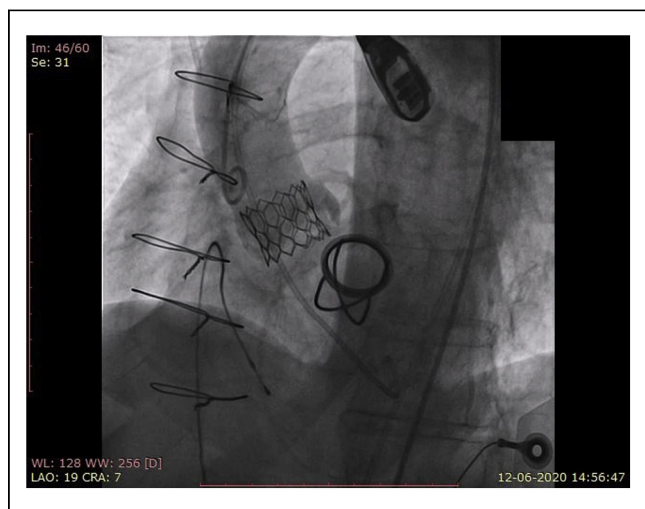
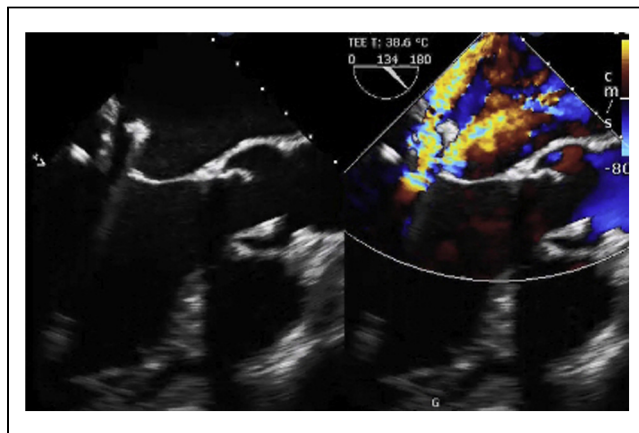
Marvin H. Eng

Follow this and additional works at: https://scholarlycommons.henryford.com/cardiology_mtgabstracts



mitral valve annuloplasty using a 30mm St Jude Saddle Ring. She presented with 6 months of worsening shortness of breath.

Relevant Test Results Prior to Catheterization. Her echocardiogram found recurrent severe mitral regurgitation due to leaflet tethering and a partial mitral ring dissidence, and LVEF 30%.



Relevant Catheterization Findings. Heart team deems her inoperable candidate due to frailty and status of Jehovah's witness refusing any blood product transfusion. Mitral valve edge to edge repair was thought to be challenging due to presence of mitral ring, restricted posterior leaflet and shadowing by the ring in imaging the posterior leaflet during intra-procedural TEE. In view of these, heart team recommended for transseptal transcatheter mitral valve replacement - valve in ring, with transcatheter ring dissidence repair.

INTERVENTIONAL MANAGEMENT

Procedural Step. Transseptal TMVR was performed using a 26mm SAPIEN 3 valve. Mitral paravalvular leak was repaired with 2 occluder devices (VSD 8mm and ADO2 6/4 devices). Yet procedure was complicated with iatrogenic ring dehiscence over lateral trigon region, and one of the occluder device was found to interact with the newly implanted S3 valve leaflet leading to new valvular and paravalvular leak. We implanted a new S3 valve inside the newly implanted S3 valve and eliminated the intra-valvular leak. Afterwards, we also repaired the new paravalvular leak with a ADO2 device. The valve was stable in position and the leak reduced to trace-mild.

Conclusions. This case report shows that the technical challenges for TAVR with balloon expandable prosthesis in patients with Starr-Edwards valve mitral prosthesis can be overcome with a comprehensive evaluation of the patient prior to the procedure.

STRUCTURAL HEART DISEASE - VALVULAR INTERVENTION: MITRAL OR TRICUSPID (TCTAP C-113)

TCTAP C-113

Chase the Leak - A Case of Valve-in-Ring with Mitral PVL Closure

Chak Yu So,¹ Guson Kang,² Marvin Eng³
¹Prince of Wales Hospital, Hong Kong, China; ²VAPAHCS & Stanford Health Care, USA; ³Henry Ford Hospital, USA

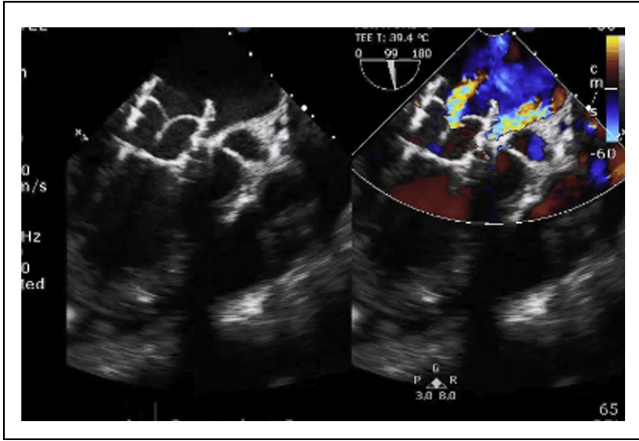


CLINICAL INFORMATION

Patient Initials or Identifier Number. CT

Relevant Clinical History and Physical Exam. CT is a 75-year-old Jehovah's witness with a history of Ca breast, chemotherapy induced cardiomyopathy, atrial fibrillation and severe mitral regurgitation with prior





Conclusions. Learning points:

1. TMVR with PVL Closure is feasible to tackle recurrent mitral regurgitation post mitral ring annuloplasty with ring dehiscence.
2. Obtaining access across the ring dehiscence before TMVR valve implantation is important to avoid wiring crossing into newly implanted valve stent strut
3. Valve in ring TMVR could result in ring dehiscence, commonly at trigone region
4. Be ready to chase the leak in all VIR TMVR

