

**X CONGRESSO NAZIONALE
ECOCARDIOCHIRURGIA 2018**

MILANO, 9-11 APRILE 2018



**INSUFFICIENZA MITRALICA DEGENERATIVA
DIAGNOSI E RIMEDI A CUORE CHIUSO**

Esperienze condivise: non sempre tutto va come vorremmo...Come possiamo rimediare?



**Centro Cardiologico
Monzino**

Giorgia
Bonalumi

MitraClip in previous surgical edge-to-edge mitral repair

- **76-year-old man**
- **2002: mitral surgical repair with stitching (surgical edge-to-edge mitral repair) of the posteromedial commissure between A3-P3 scallops without annuloplasty**
- **2009: hemicolectomy for colon cancer complicated by intestinal infarction requiring ileostomy**
- **2010: left thrombophlebitis and pulmonary embolism treated with chronic oral anticoagulation**
- **2011: surgical removal of lung metastasis**
- **Permanent atrial fibrillation since May 2013**
- **Increasing dyspnea for less than ordinary activity in the last 8 months (NYHA Class III)**

MitraClip in previous surgical edge-to-edge mitral repair

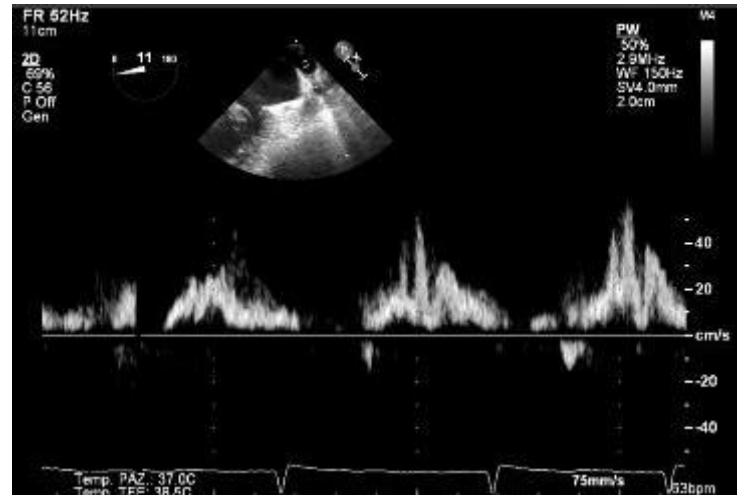
- **Transthoracic echocardiography:**
 - **Severe MR (vena contracta 8 mm)**
 - **Mean diastolic gradient= 1 mmHg**
- **Transesophageal echocardiography:**
 - **Large prolapse of P3, extended to P2, due to partial detachment of the edge-to-edge stitch**
 - **Severe regurgitant jet (P2-P3)**
- **Patient was deemed at very high risk for redo surgery that he refused anyway**
- **Percutaneous MV repair with the MitraClip was proposed**

Baseline TEE

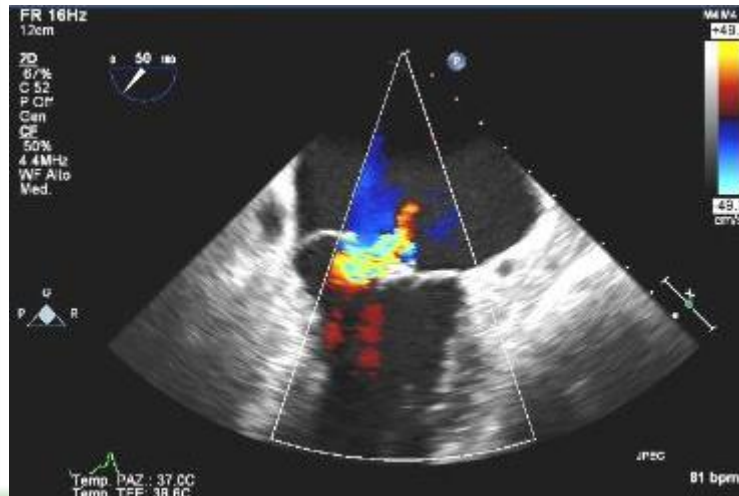
3D surgical view



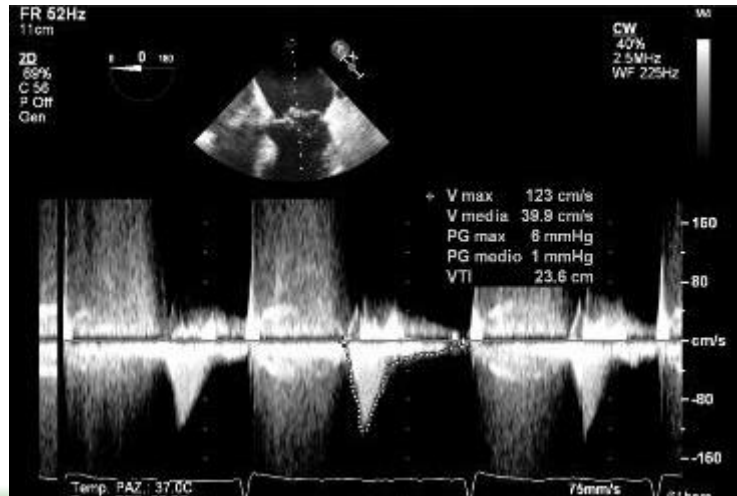
Pulmonary venous flow reduced systolic wave



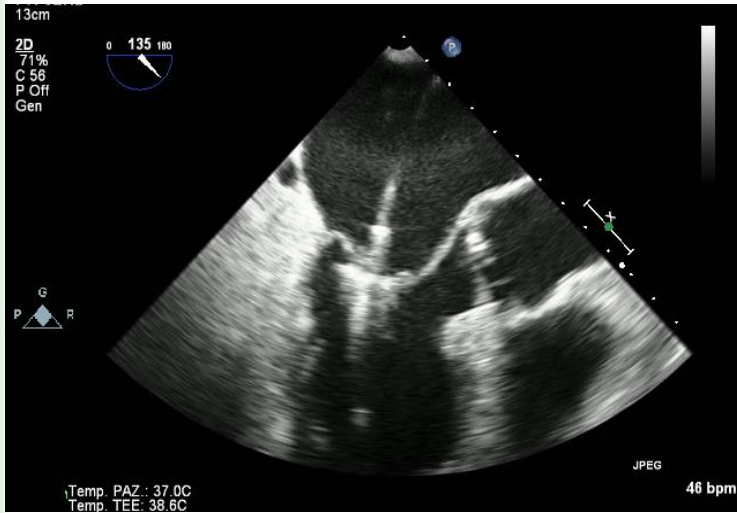
Color Doppler



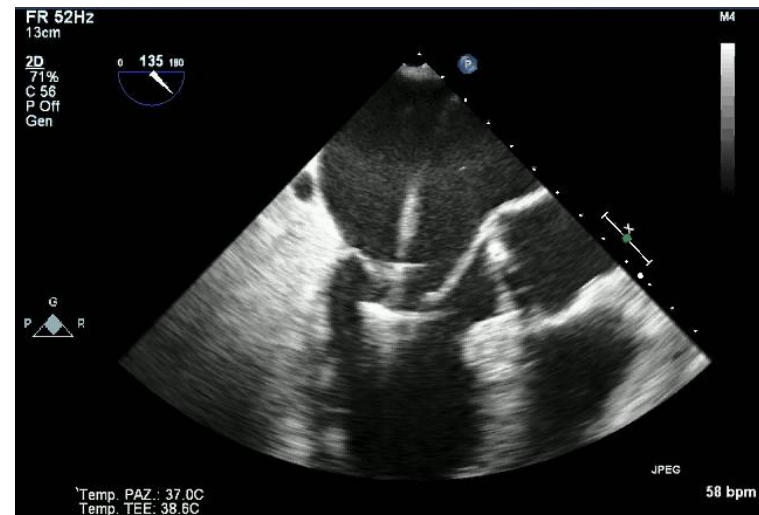
Mean diastolic gradient (1 mmHg)



Several attempts at leaflet grasping were made



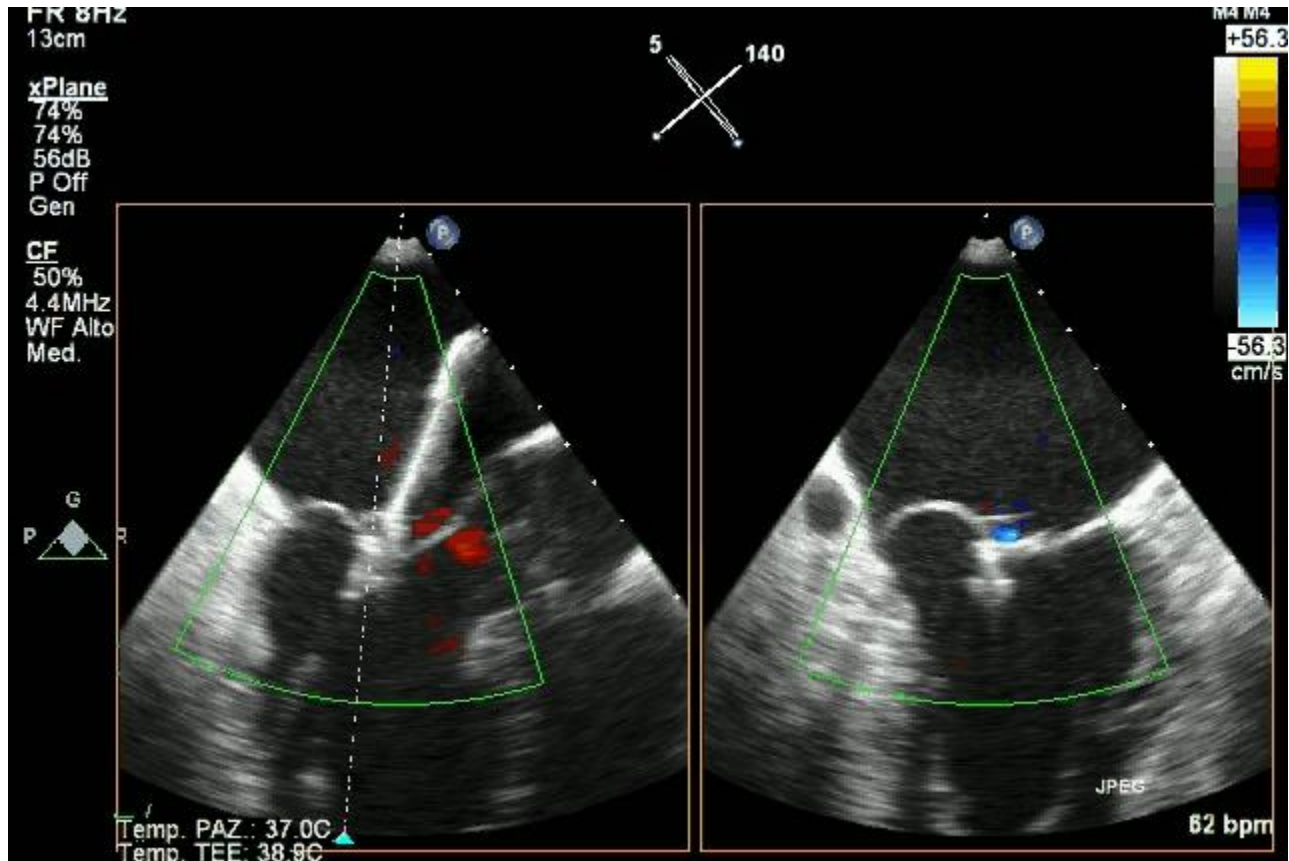
LVOT



LVOT

We finally succeeded

XPlane



LVOT

Intercommisural

1st clip deployment close to the posteromedial commissure



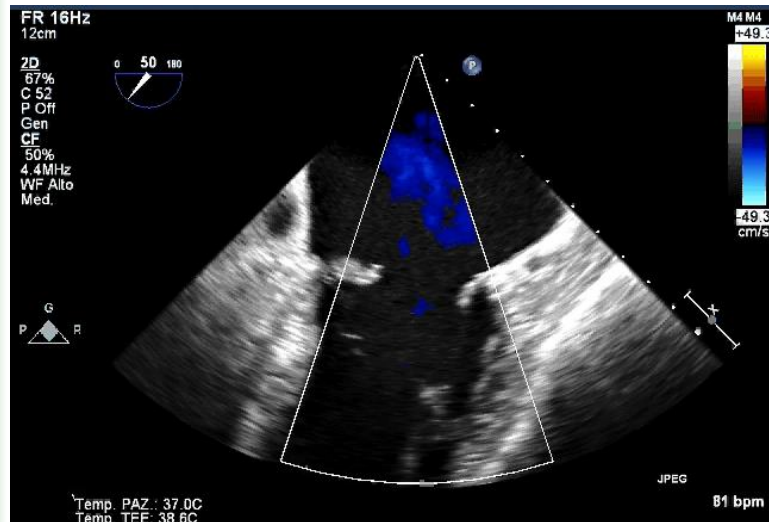
Pre-detachment



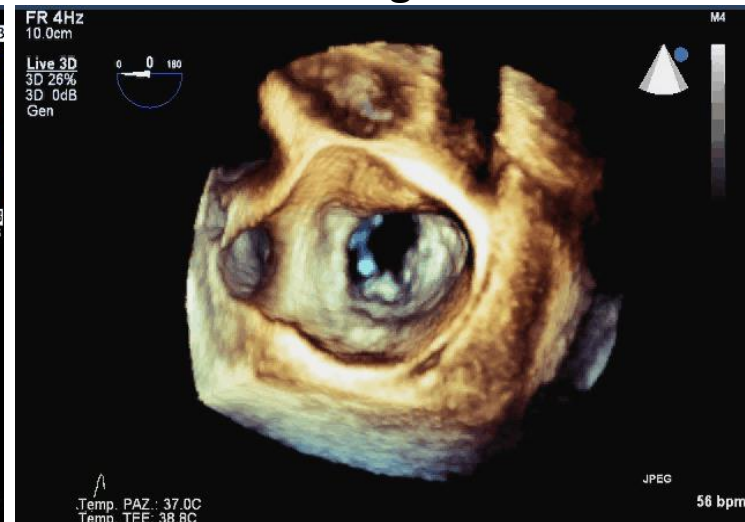
Post-detachment

Preprocedura TEE

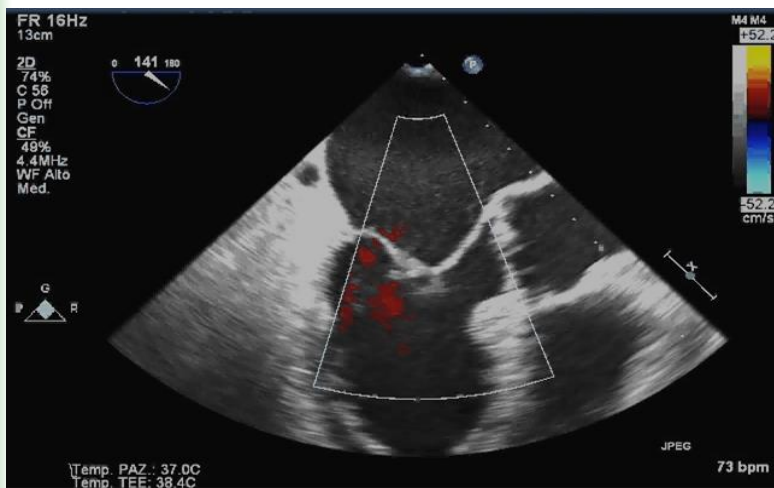
Color Doppler



3D surgical view



After 1st clip



2nd clip deployment in a more lateral position to obtain a better leaflet stabilization without functional stenosis



Pre-detachment



Post-detachment

After 2nd clip

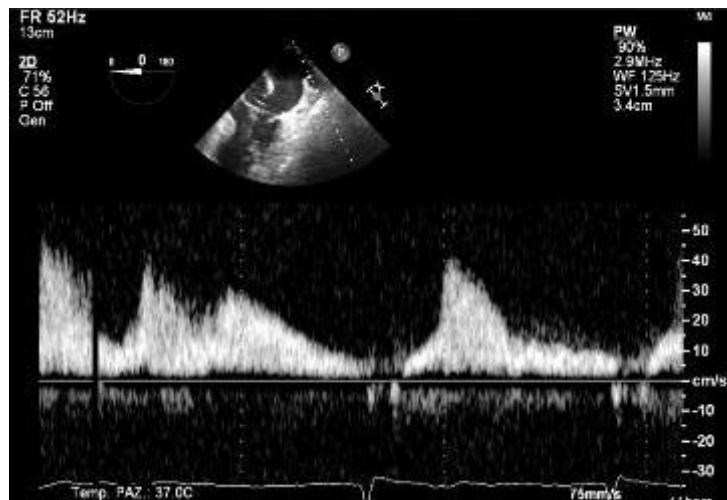
3D surgical view



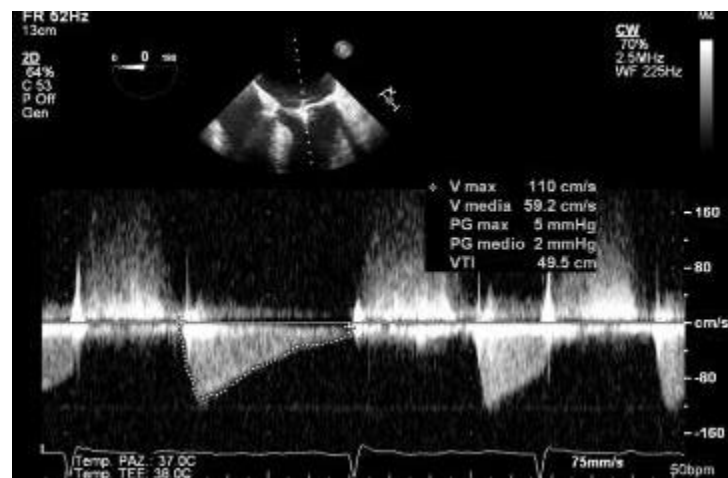
Color Doppler (vena contracta 2 mm)



Normalization of pulmonary venous flow



Mean diastolic gradient (2 mmHg)

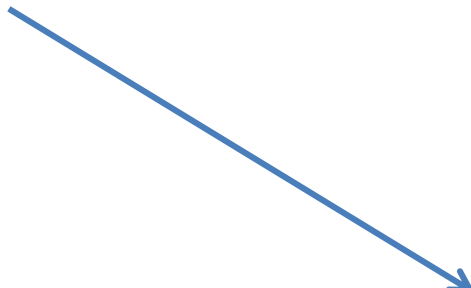


3D surgical view

Baseline



1st clip

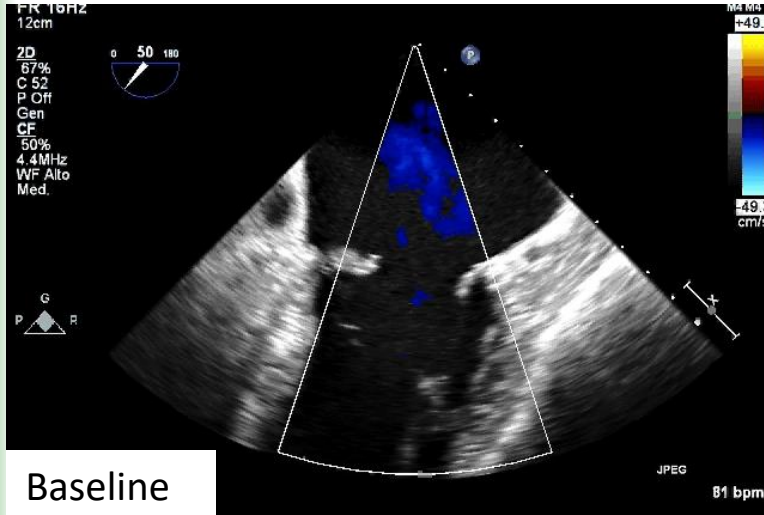


2nd clip



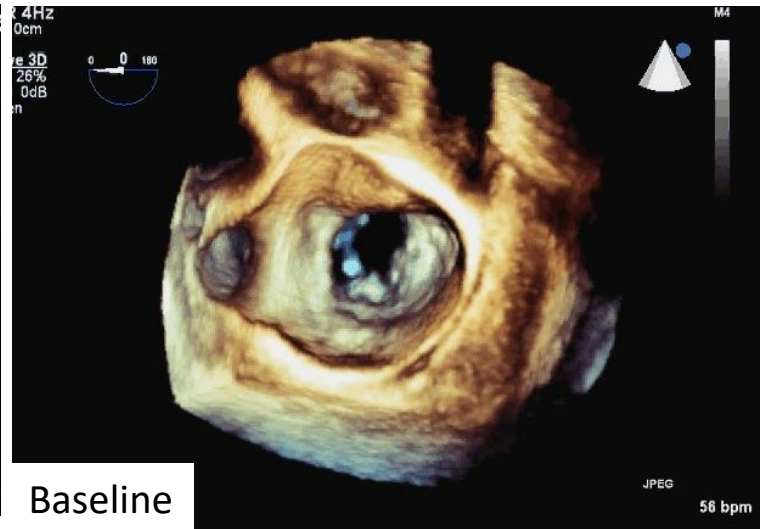
Preprocedura TEE

Color Doppler



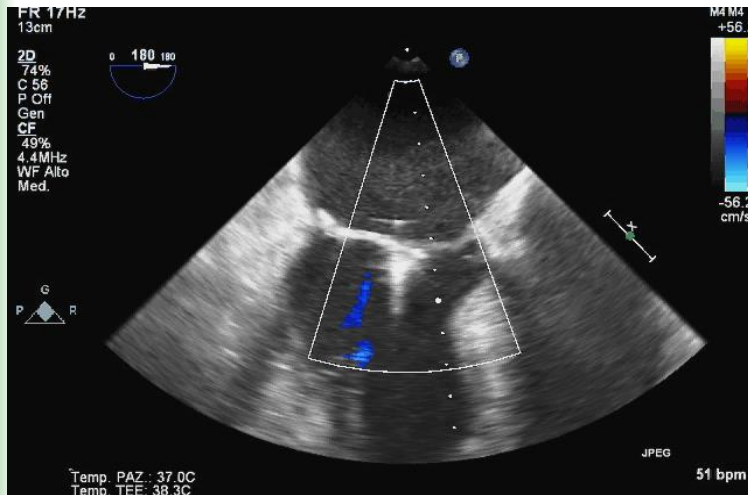
Baseline

3D surgical view



Baseline

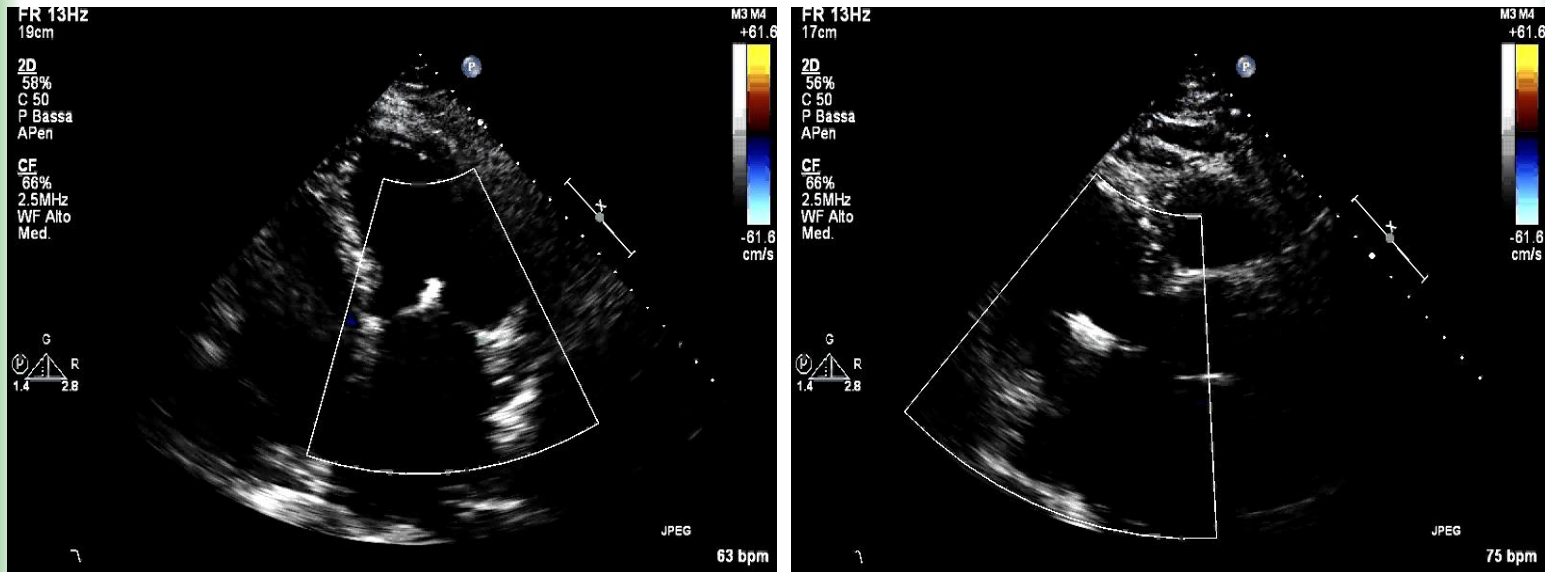
Final Result



One-month Follow-up

Significant clinical improvement
(NYHA Class III)

TTE



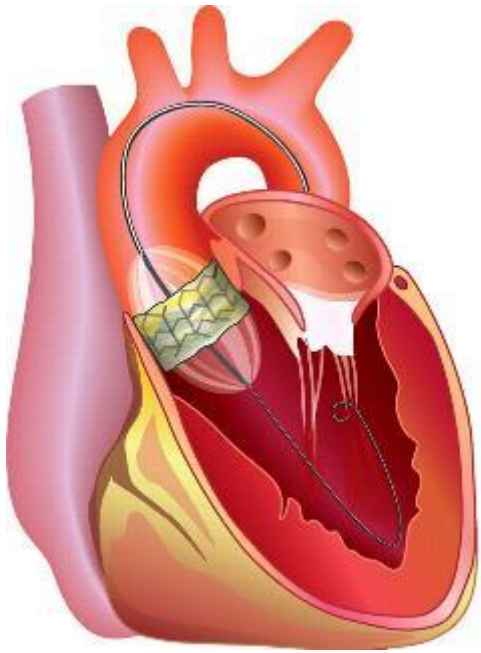
- **Male, 81ys**
- **Severe aortic valve stenosis (NYHA II-III, syncope)**
- **Bicuspid aortic valve**
- **Normal EF**
- **CAD (previous inferior MI, chronic occlusion CDx)**
- **Obesity, dislipidemia, hypertension**
- **Polyneuropathy**

Aortic arch aneurysm

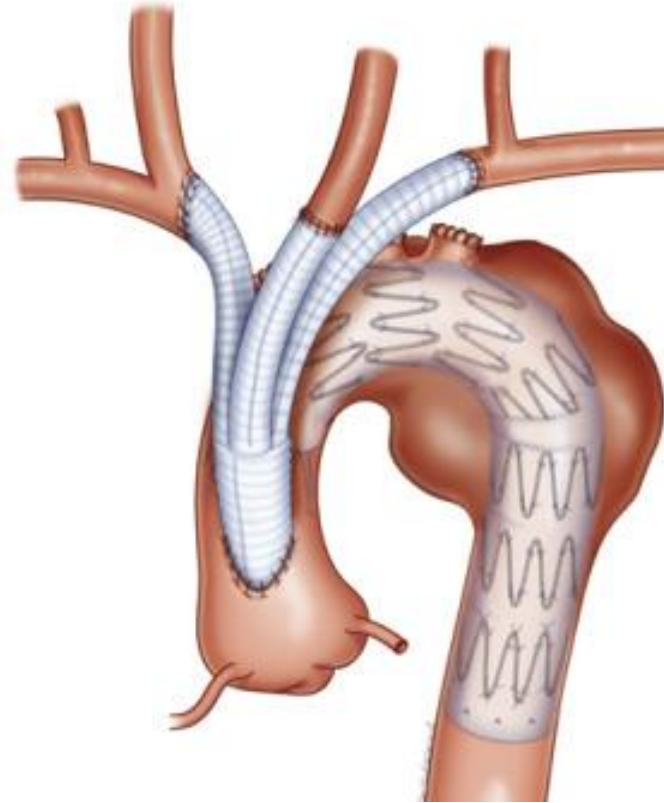


36 x 46.8 mm

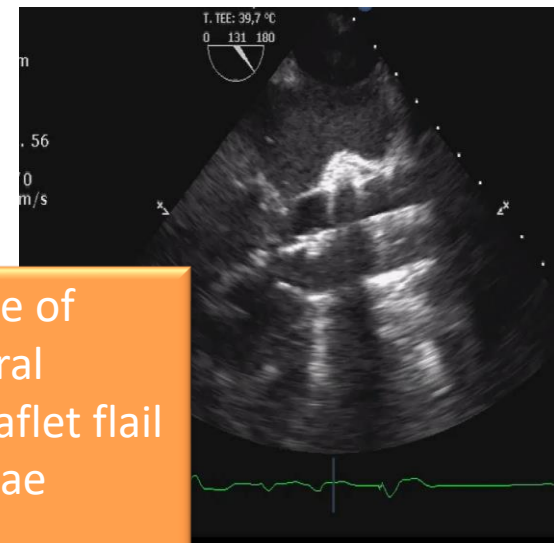
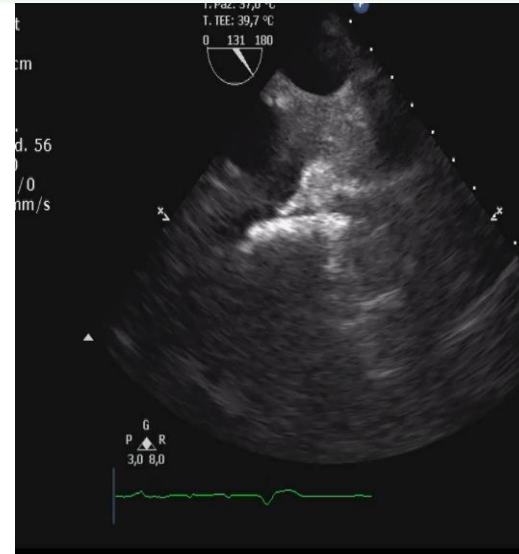
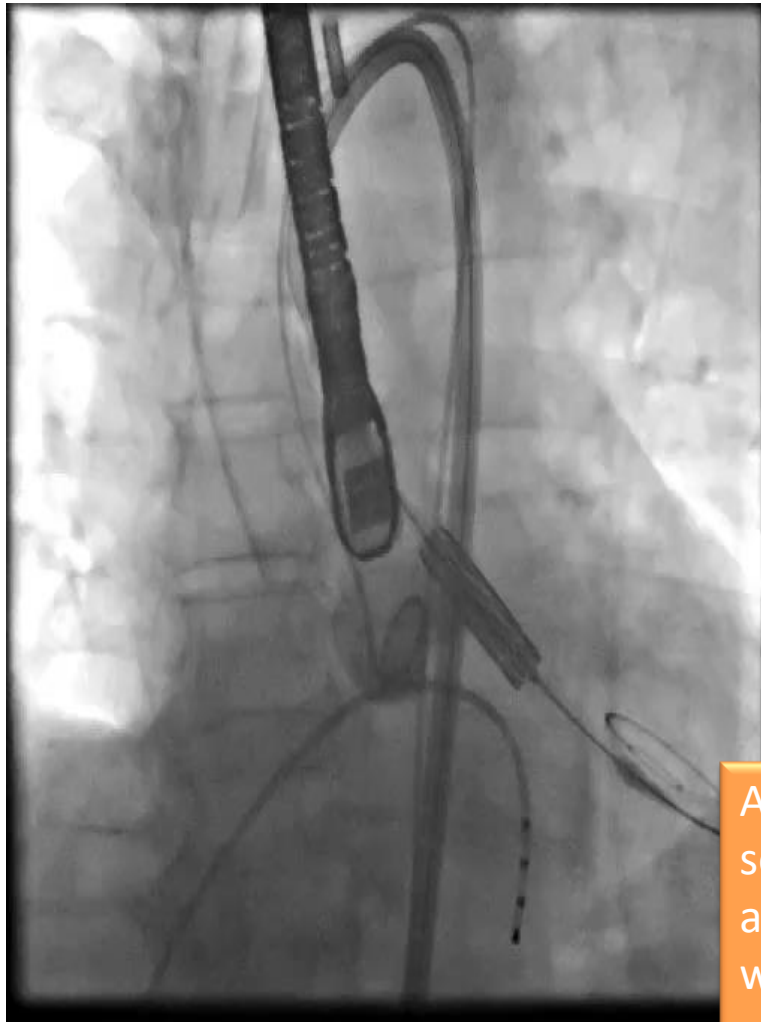
TAVI + DEBRANCHING + TEVAR



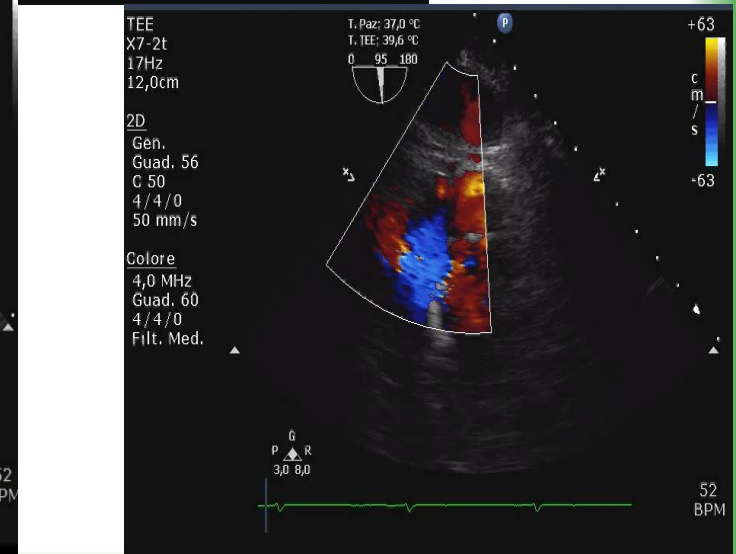
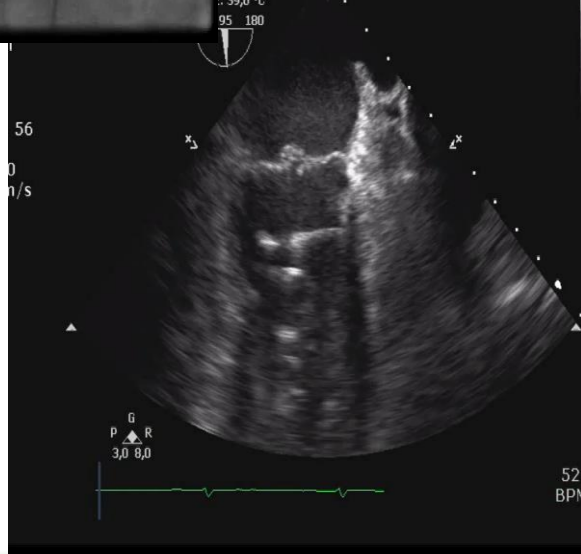
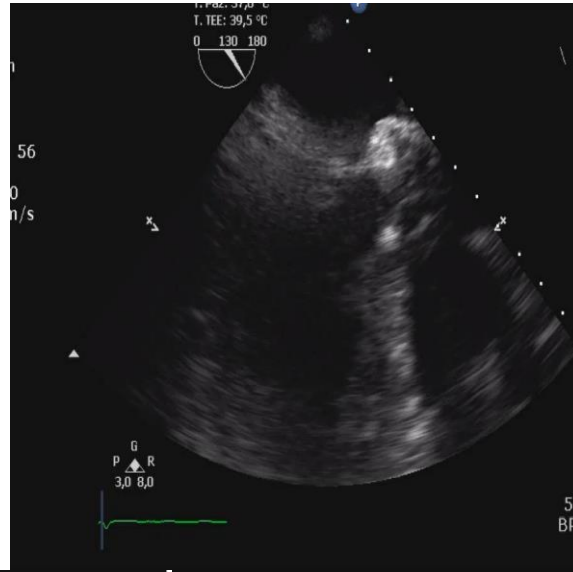
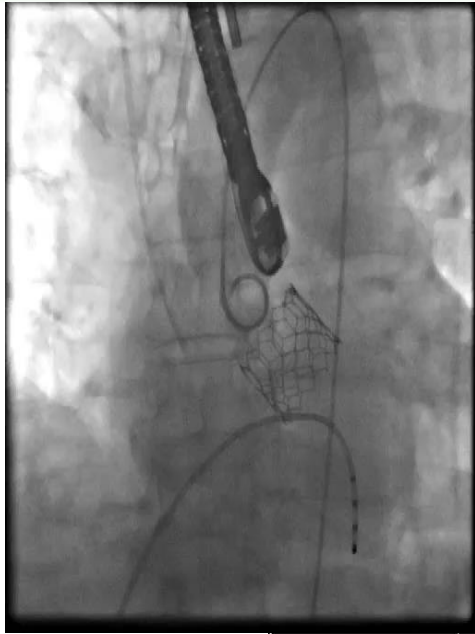
Edwards Sapien3 29mm

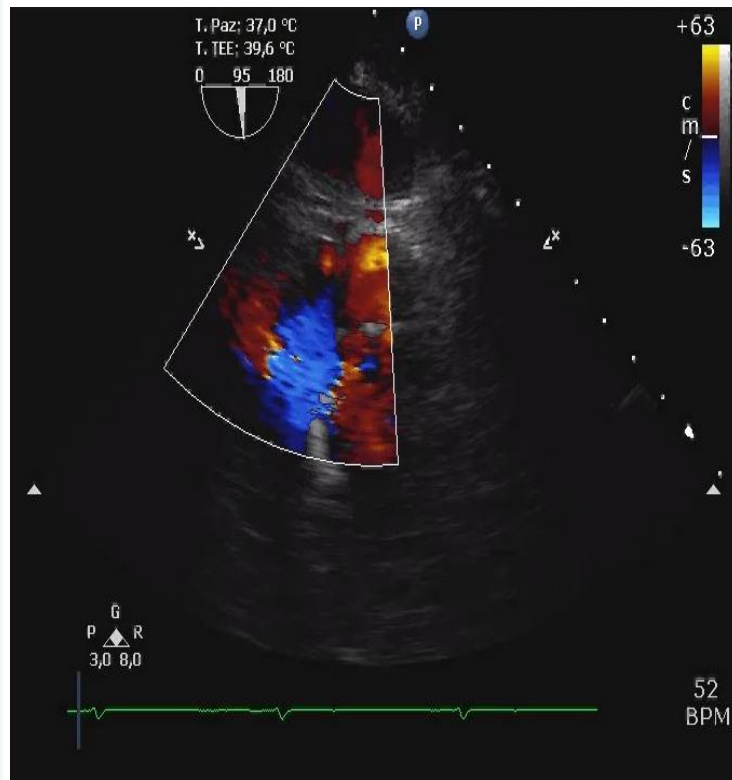


TAVI

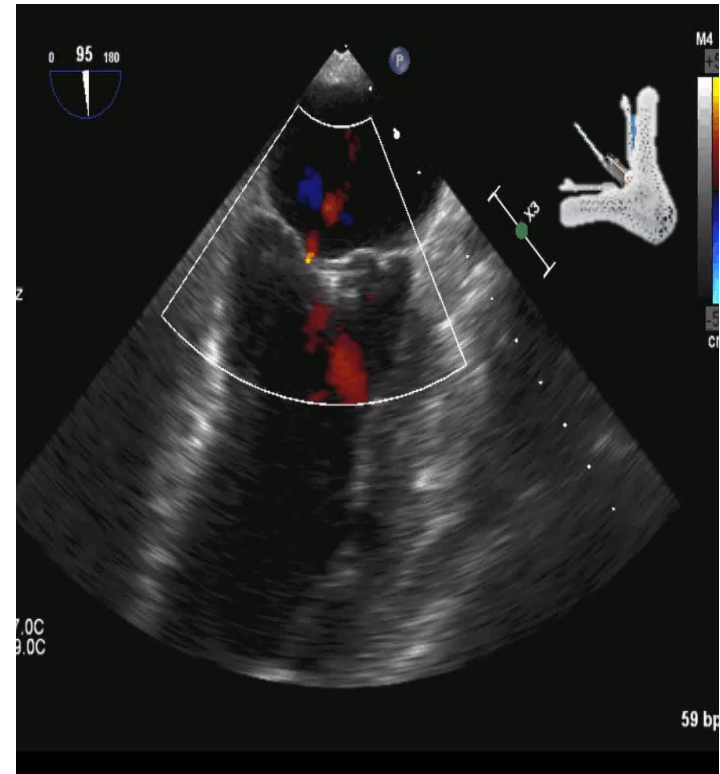


Appearance of
severe mitral
anterior leaflet flail
with chordae
rupture





**Severe MR immediately
after TAVI**



**Trivial MR after MV repair
with 2 MitraClips in the same
session**

Grazie

