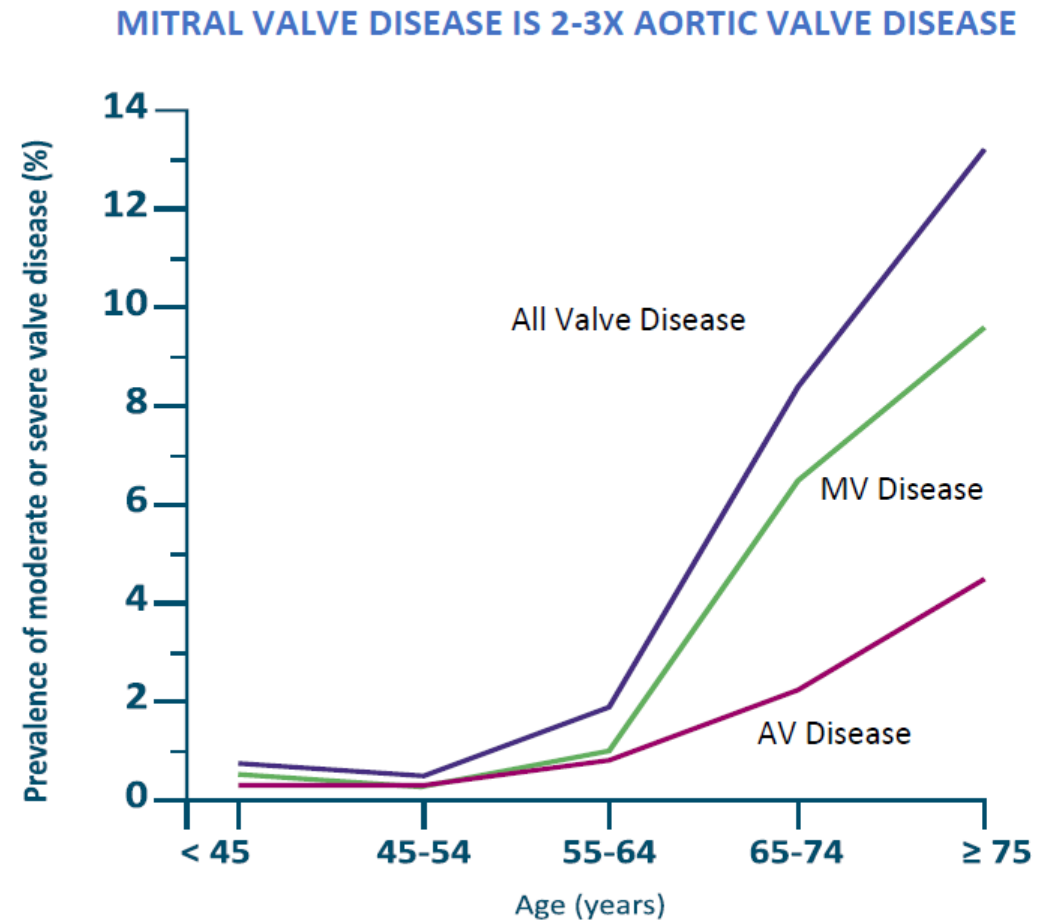


MITRACLIP U DMR – JAK NA TO

J. JANUŠKA, M. HUDEC, M. URBAN, L. GAJDŮŠEK, M. DORDA, L.
ŠKŇOUŘIL,

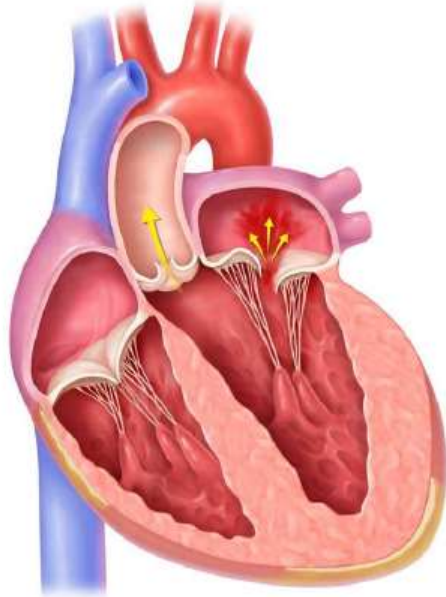
NEMOCNICE PODLEŠÍ A.S., TŘINEC

PREVALENCE MI REGURGITACE



CLASSIFICATION OF MITRAL REGURGITATION

MR occurs when the mitral valve fails to close completely, causing blood flow to move backward into the left atrium¹



Primary:

Anatomic abnormality of the mitral valve

- Leaflets
- Subvalvular apparatus
- Chordae and papillary muscles



Secondary:

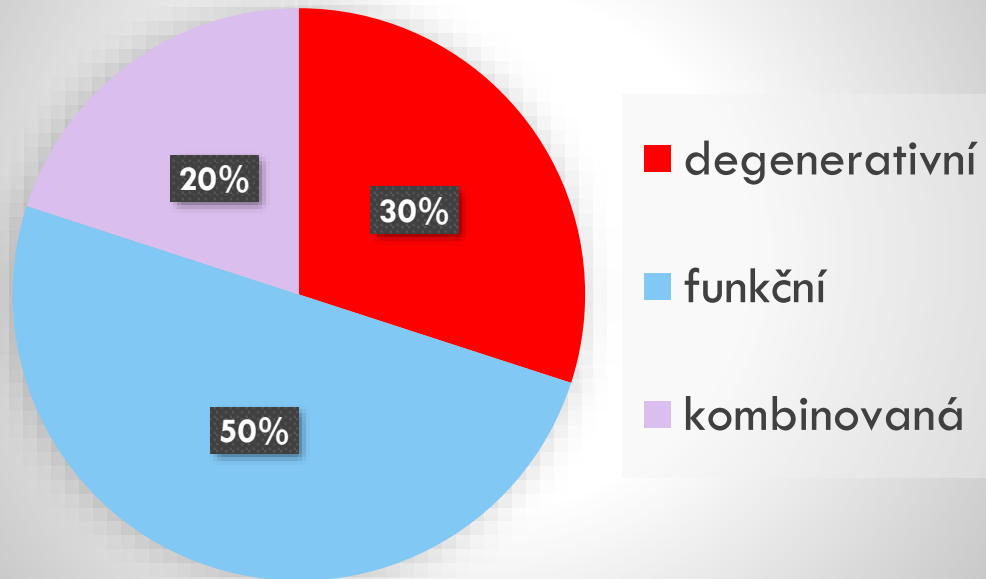
Left ventricular dilation

- Leaflet tethering
- Mitral annular dilation
- Incomplete coaptation of the mitral valve

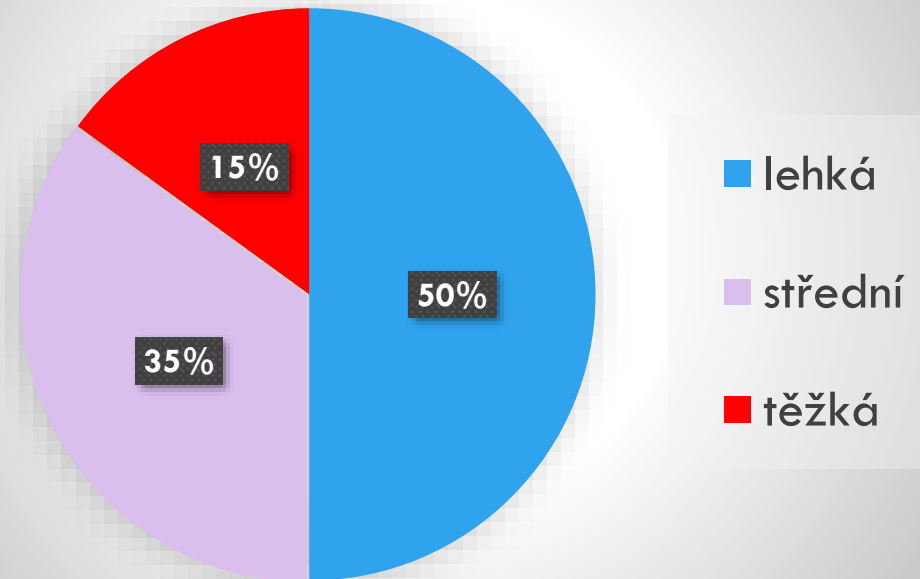
1. Mayo Clinic Staff. Mitral valve regurgitation: symptoms and causes. The Mayo Clinic. <http://www.mayoclinic.org/diseases-conditions/mitral-valve-regurgitation/symptoms-causes/dxc-20121850>. Published March 22, 2016. Accessed July 28, 2016.

MITRÁLNÍ INSUFFICIENCE

etiologie

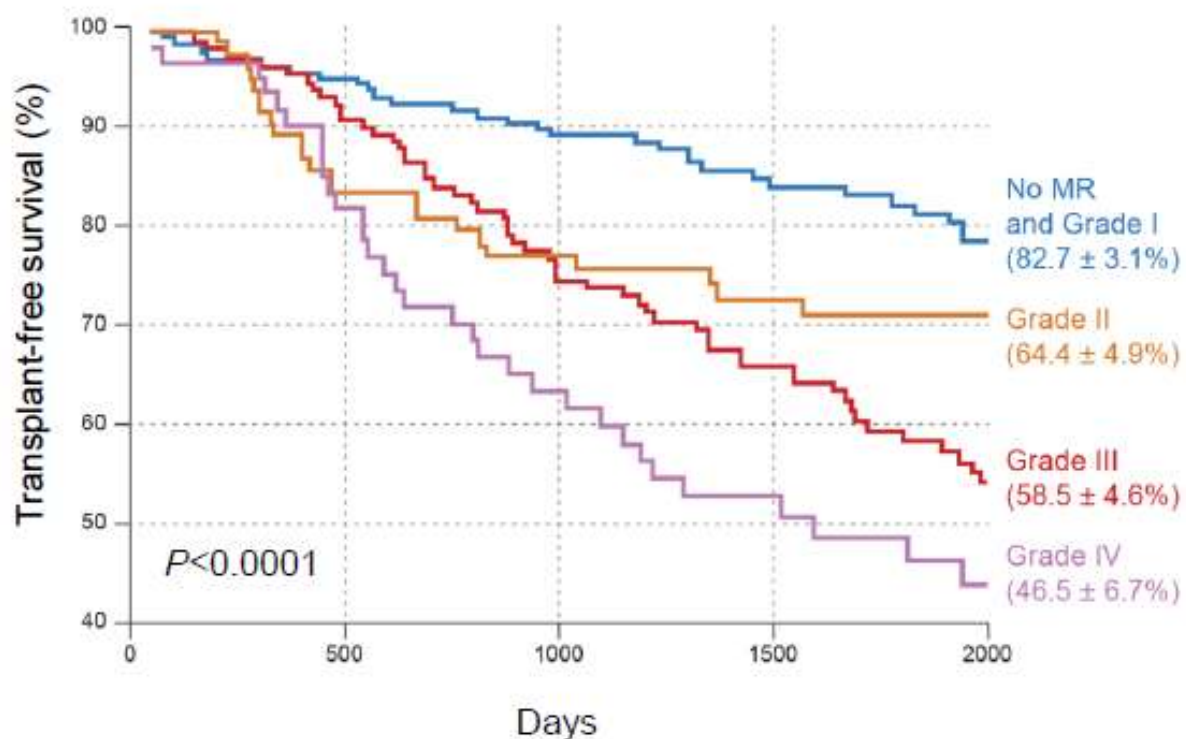


Závažnost

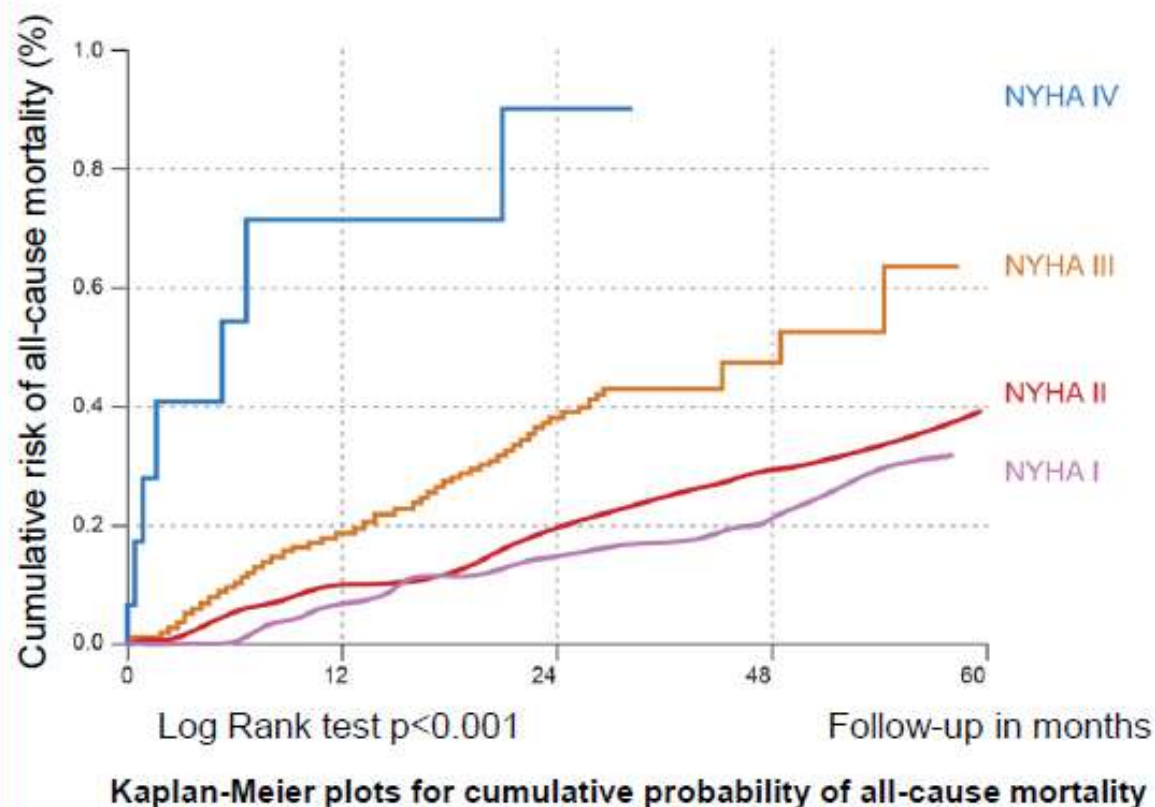


MORBIDITA A MORTALITA MR

Event – free survival decreases with increasing MR severity^{1,2,3}



Risk of mortality increases with increasing NYHA class⁴

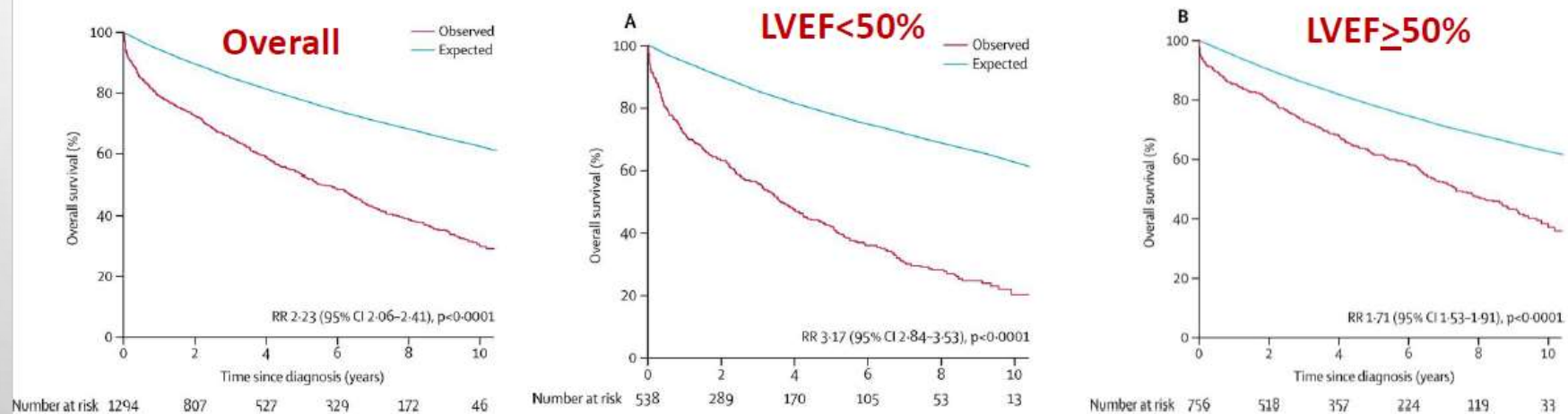


* Markwick A. TCT-784 Prognostic implications of moderate and severe mitral regurgitation in contemporary clinical care. *J Am Coll Cardiol*. 2012;60(17)(suppl B):B228.
 1. Bursi F et al. *Eur J Heart Failure* 2010; 12:382-88; 2. Enriquez-Sarano M, Avierinos J-F, Messika-Zeitoun D, et al. Quantitative determinants of the outcome of asymptomatic mitral regurgitation. *N Eng J Med*. 2005;352(9):875-883.; 3. Grigioni F, Tribouilloy C, Avierinos JF, et al. Outcomes in mitral regurgitation due to flail leaflets: a multicenter European study. *J Am Coll Cardiol Img* 2008;1(2):133-141 ; 4. Ahmed A et al. *Am Heart J*. 2006 151: 444-50

PŘEŽÍVÁNÍ PACIENTŮ S MI INSUFFICIENCÍ

1294 community residents (median age 77 yrs [IQR 66–84]) with moderate or severe isolated mitral regurgitation in Olmsted County

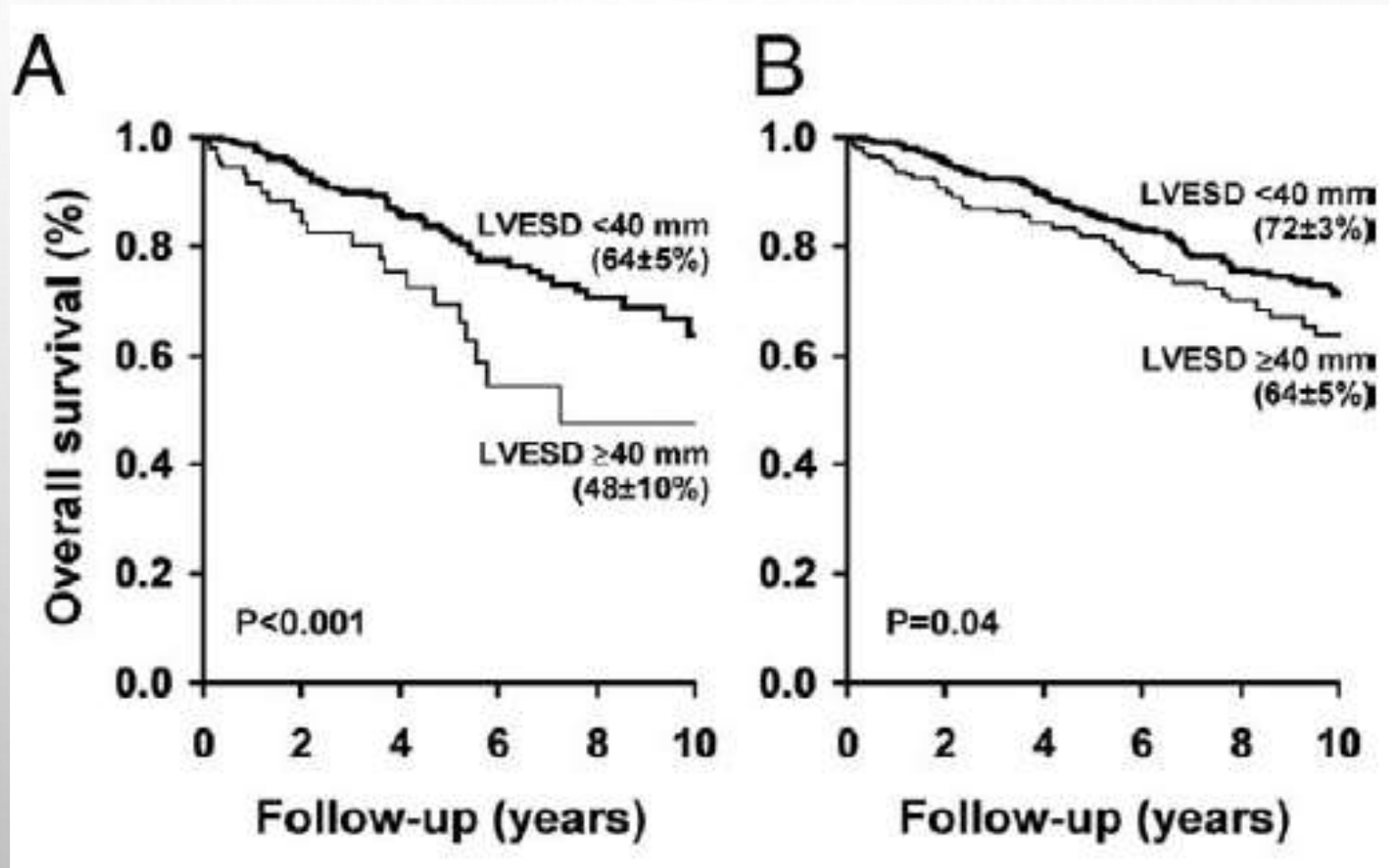
Survival after diagnosis of isolated moderate or severe MR compared to expected survival of the general Olmsted County population of same age and sex



	Primary MR	Secondary MR
Mortality	RR 1.73 [1.53-1.96]	2.72 [2.48-3.01]
HF at 5-yrs	48%	78%
Mitral surgery	29%	5%

DILATACE LK A PŘEŽÍVÁNÍ PACIENTŮ U DEGENERATIVNÍ MI REGURGITACE

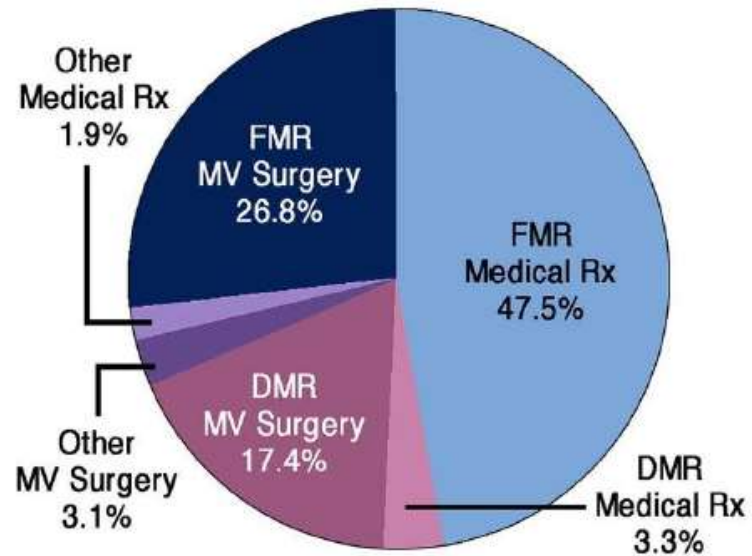
Konservativně



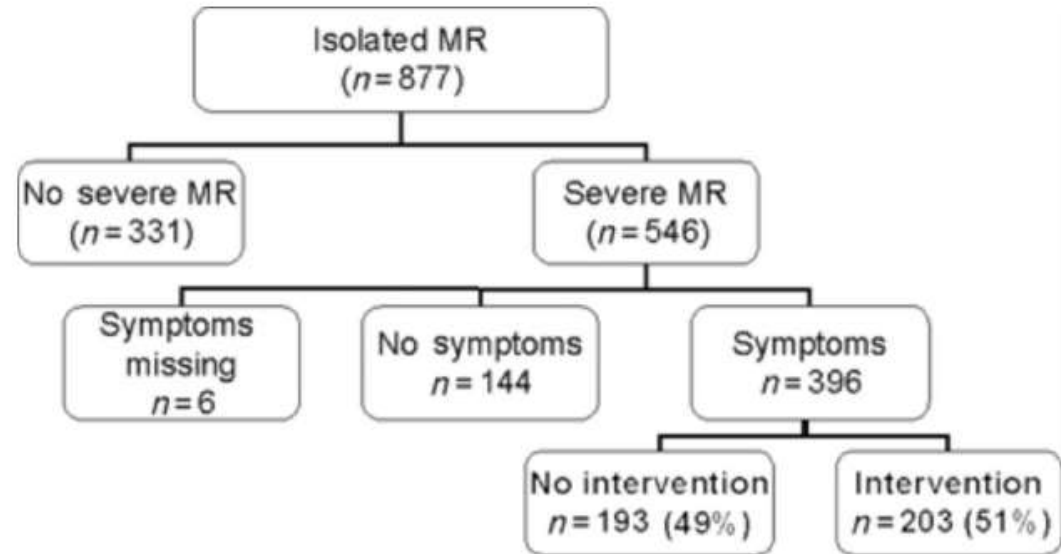
Chirurgie

ŘEŠENÍ MITRÁLNÍ INSUFFICIENCE

Medically treated patients with severe MR¹



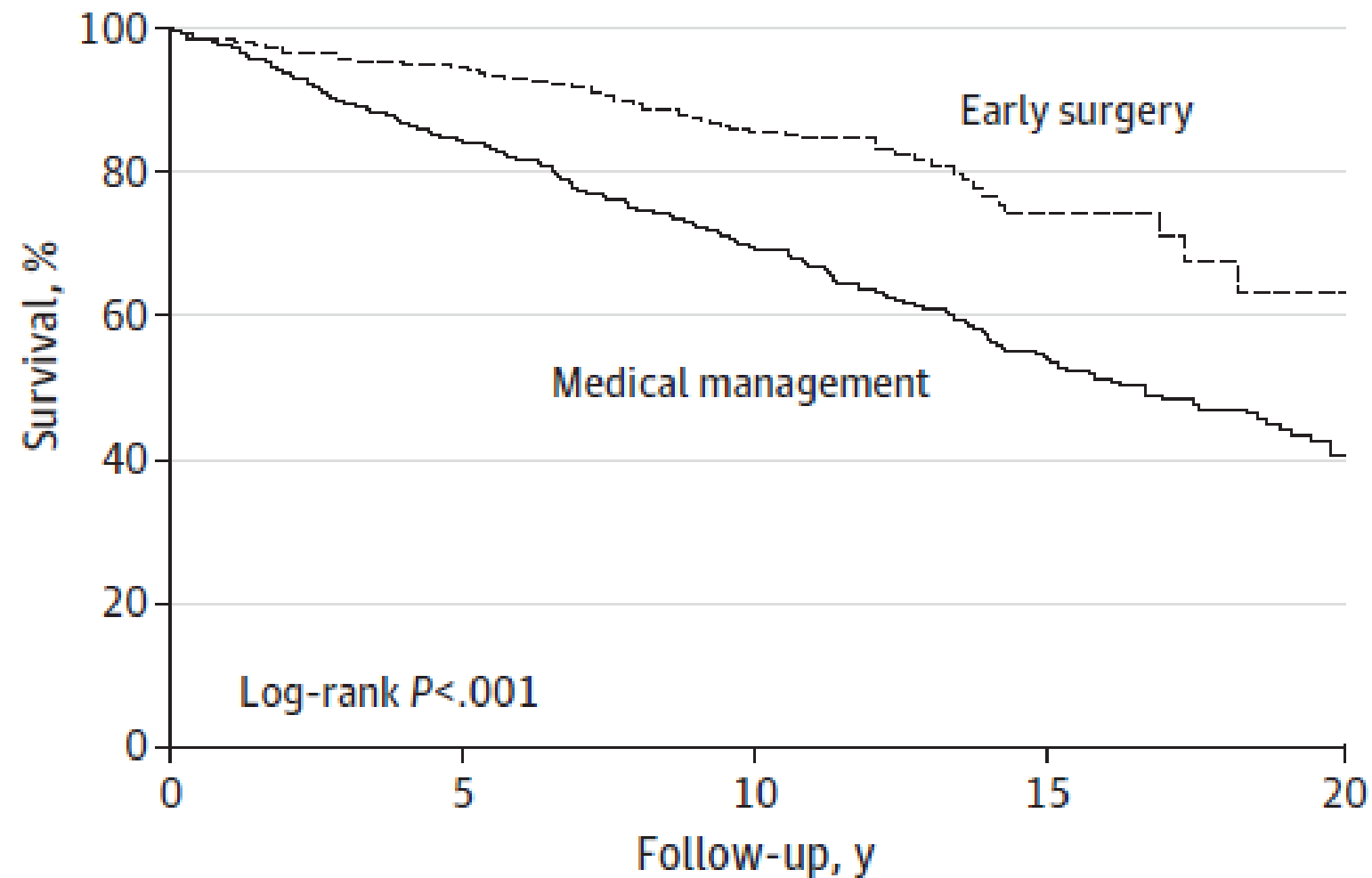
Distribution of patients with isolated MR²



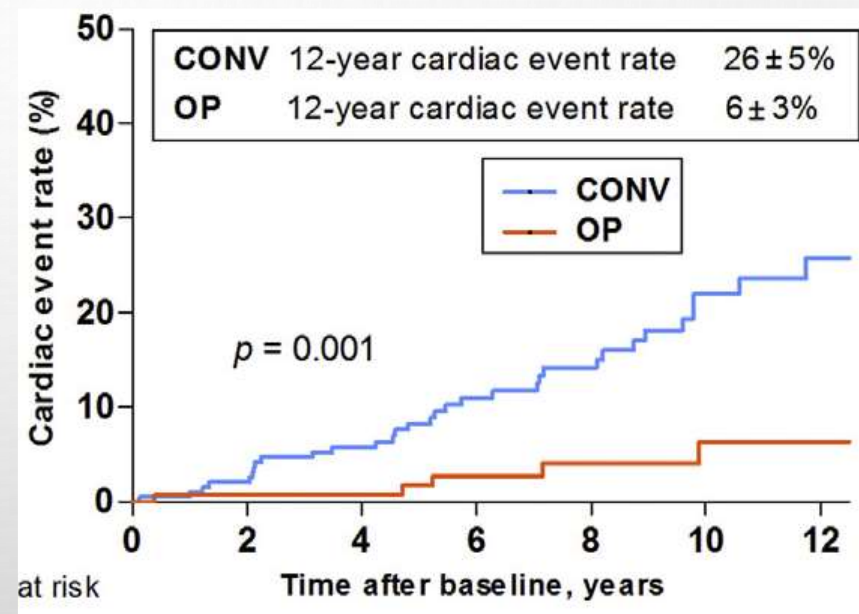
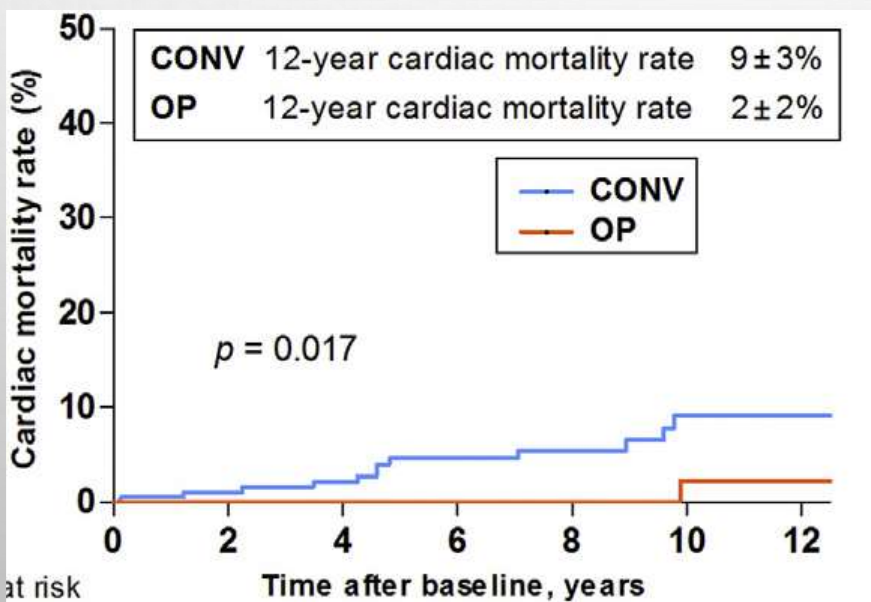
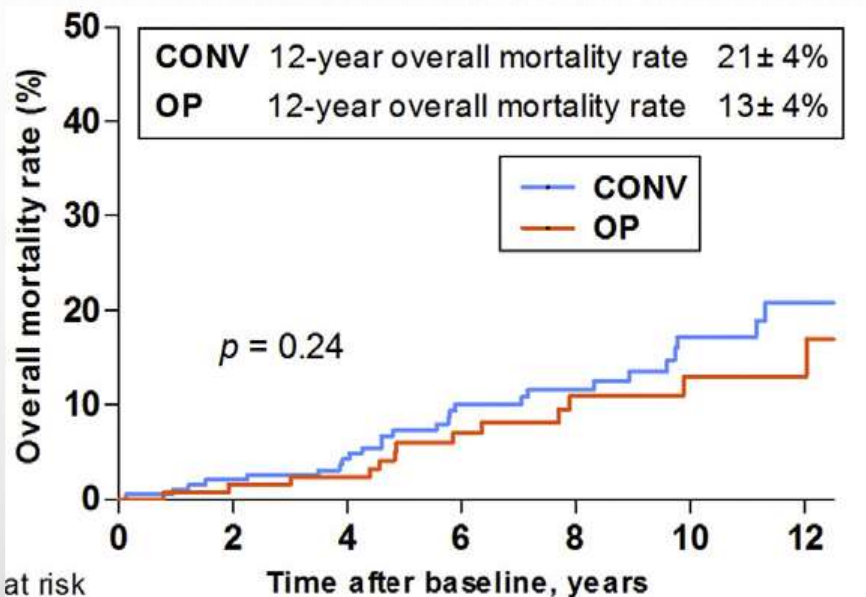
¹Goel et al. Journal of the American College of Cardiology. 2014;63:185-186.

²Mirabel et al. European Heart Journal. 2007;28(11):1358-1365.

PŘEŽÍVÁNÍ PACIENTŮ S FLAIL LEAFLET ČASNÁ CHIRURGIE X WATCHFUL WAITING

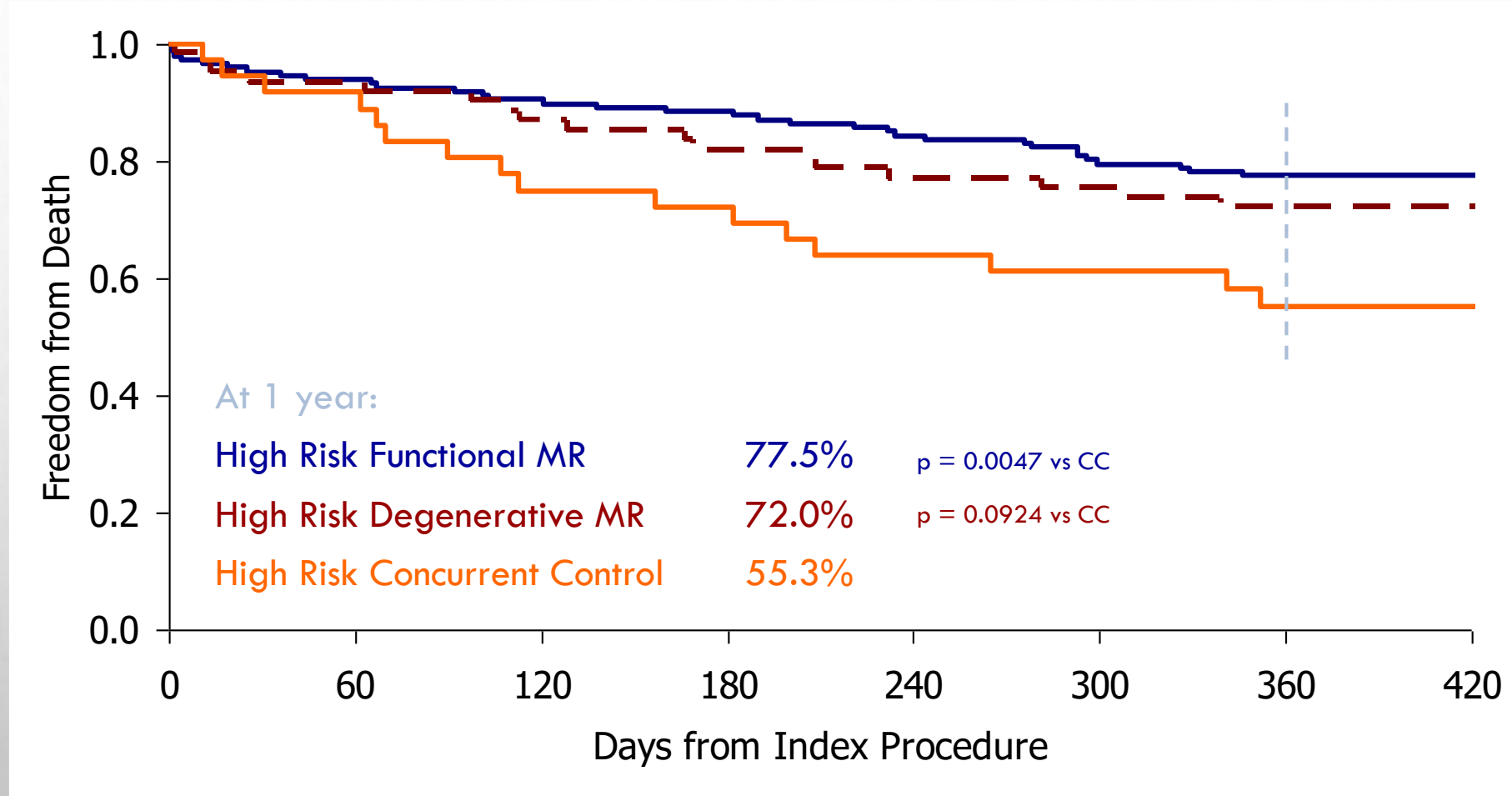


ČASNÁ CHIRURGIE X WATCHFUL WAITING U ASYMPTOMATICKÝCH PACIENTŮ



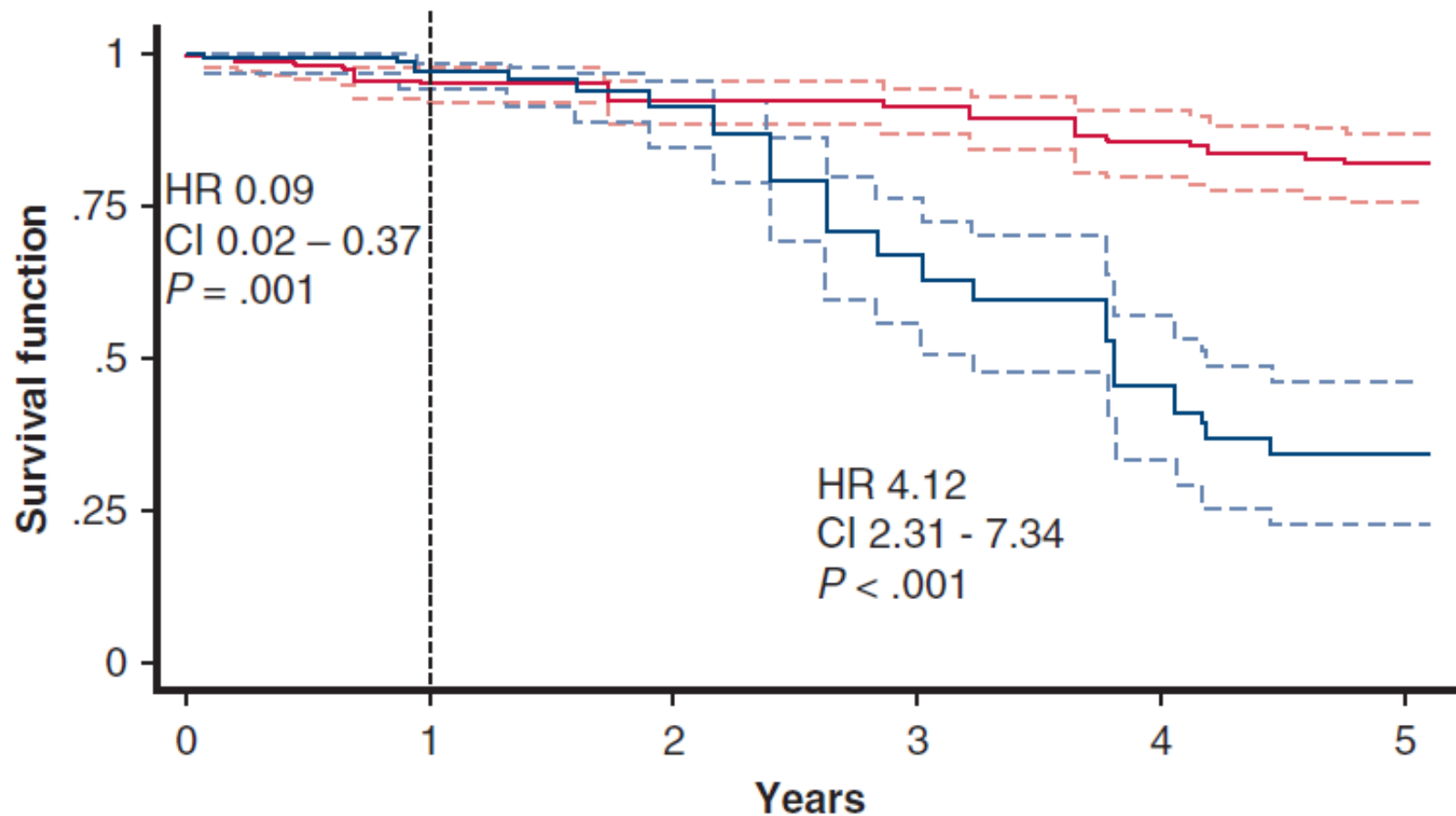
KAPLAN-MEIER FREEDOM FROM DEATH

EVEREST II HIGH SURGICAL RISK COHORT STRATIFIED BY ETIOLOGY



At Risk:	0d	6m	1yr
FMR N	149	129	112
DMR N	62	50	43
CC N	36	26	18

PŘEŽÍVÁNÍ MÁLO RIZIKOVÝCH PACIENTŮ NAD 75 LET S DMR

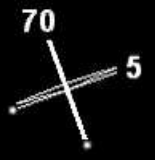


--- CI Surgery - - - CI Mitraclip
— Surgery — Mitraclip

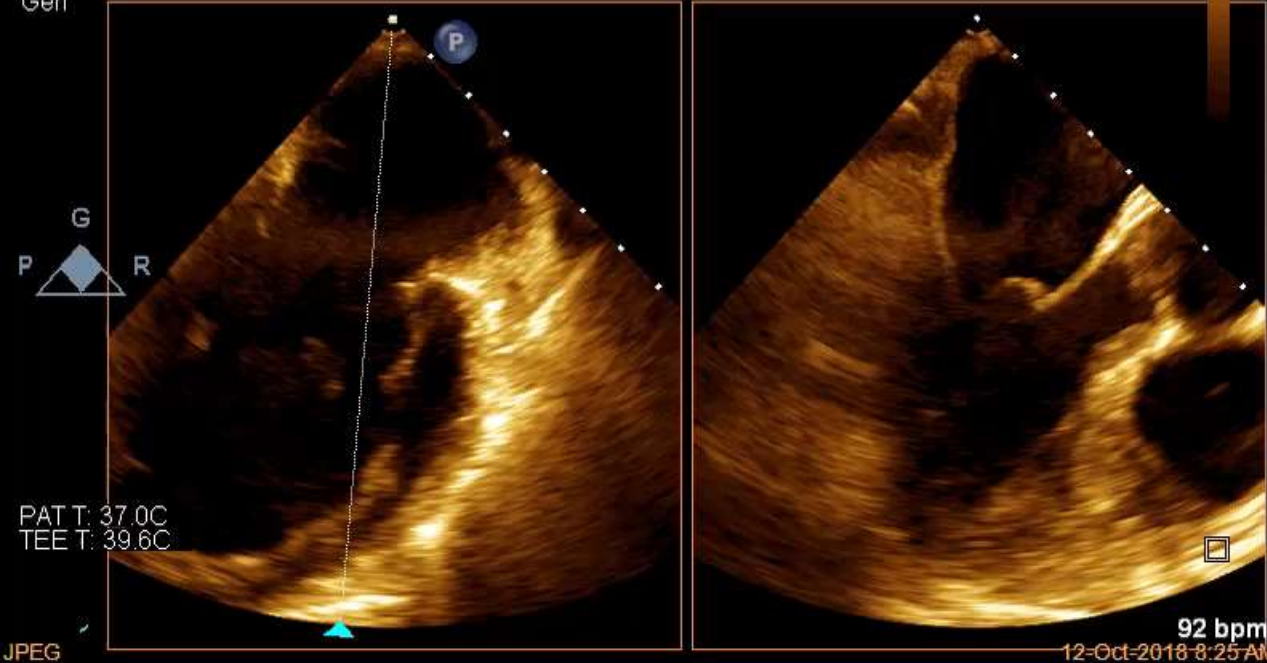
Adult Echo
X8-2t
27Hz
11cm

TIS0.2 MI 0.9

M4



xPlane
56%
56%
50dB
P Off
Gen

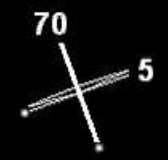


PROLAPS

Adult Echo
X8-2t
13Hz
11cm

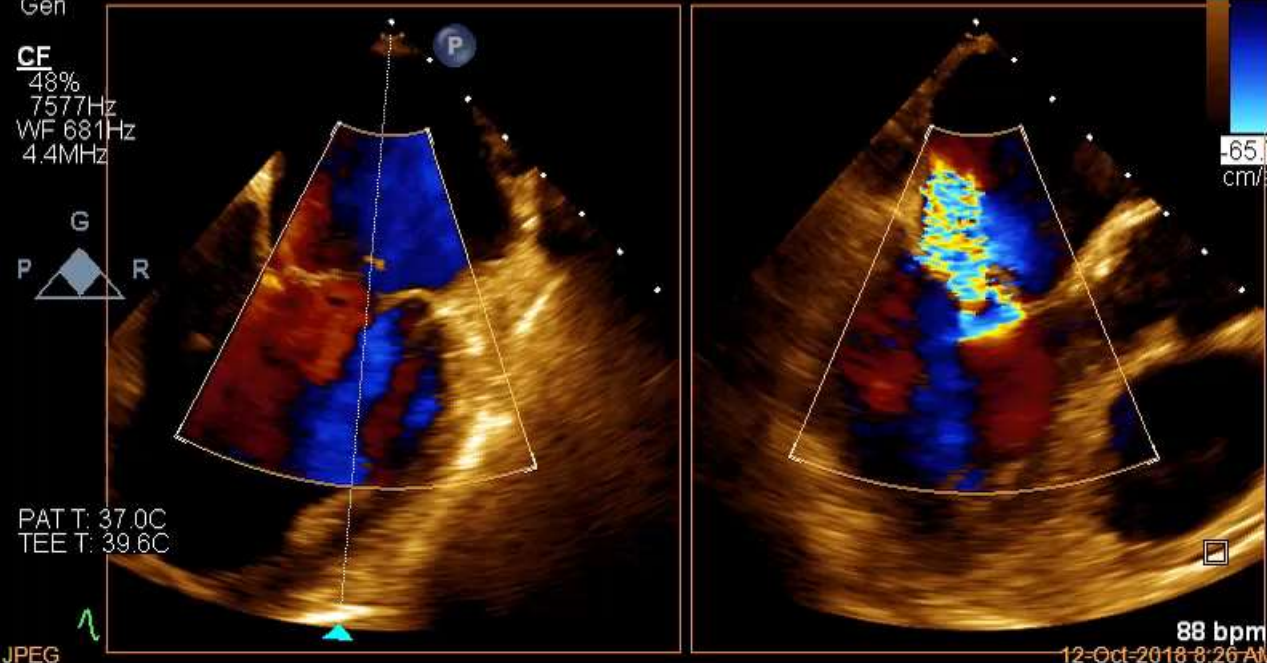
TIS0.7 MI 0.4

M4M4

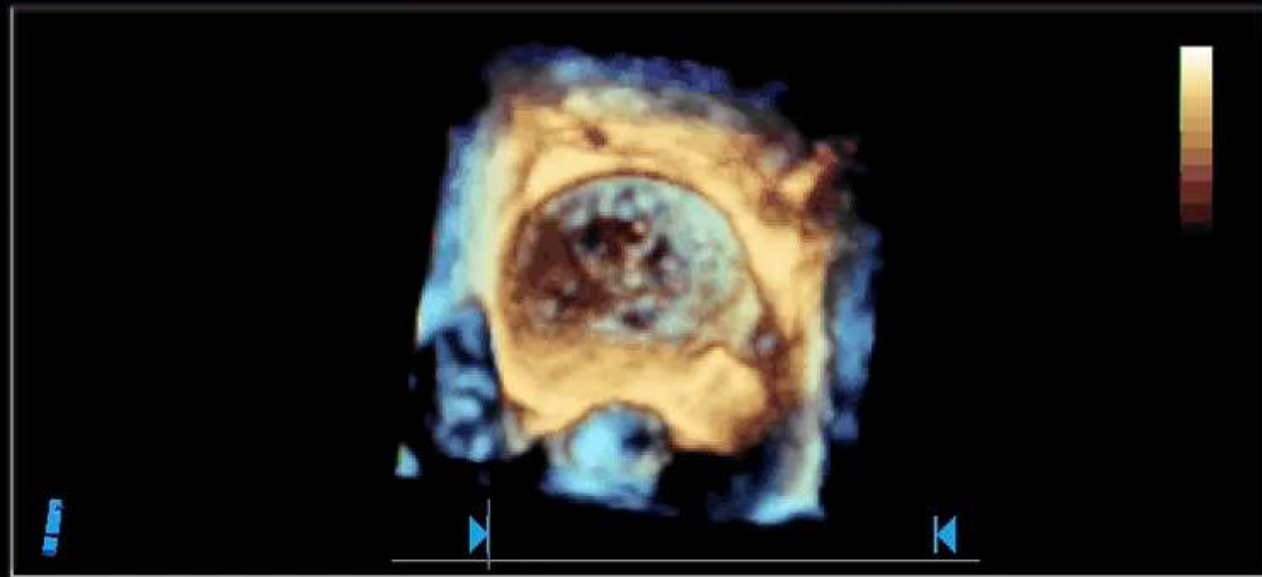
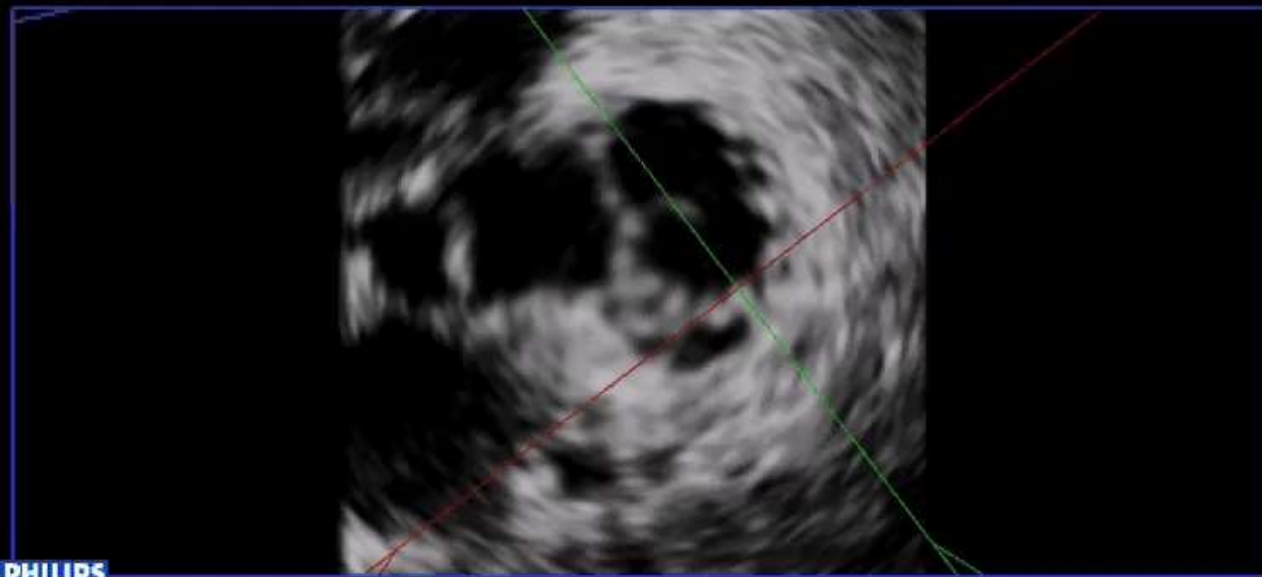
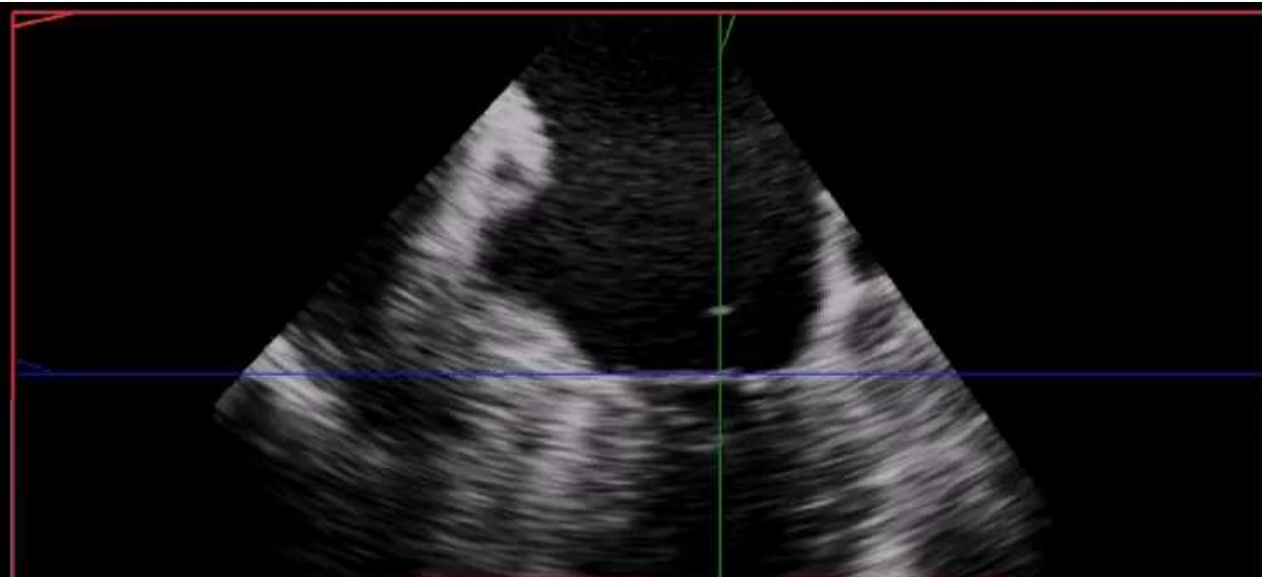
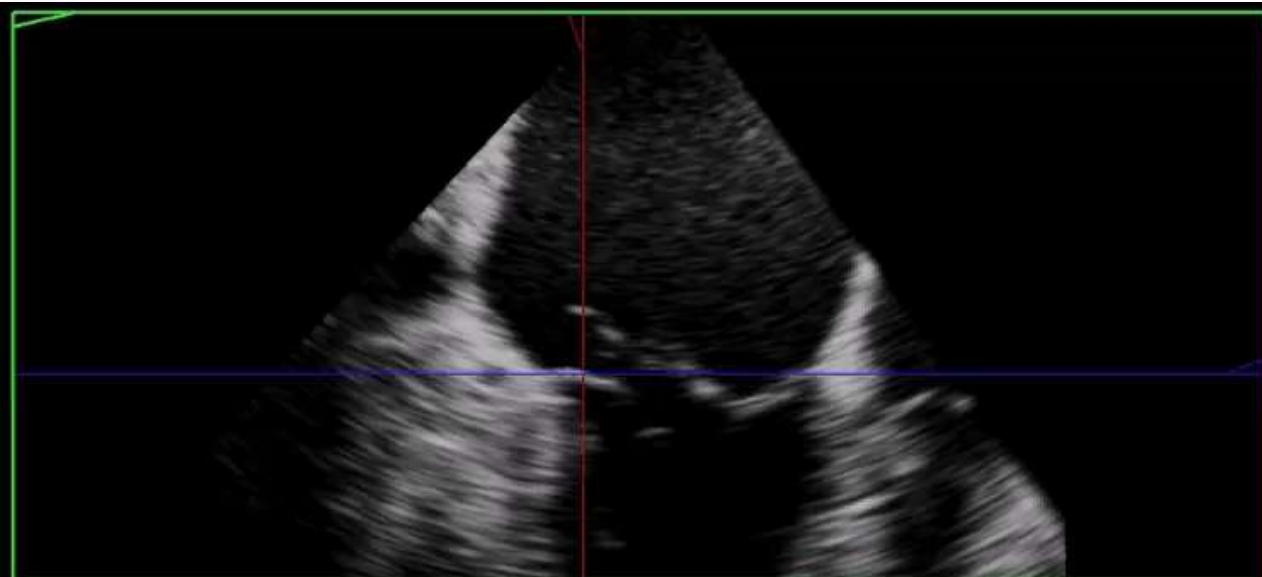


xPlane
58%
58%
50dB
P Off
Gen

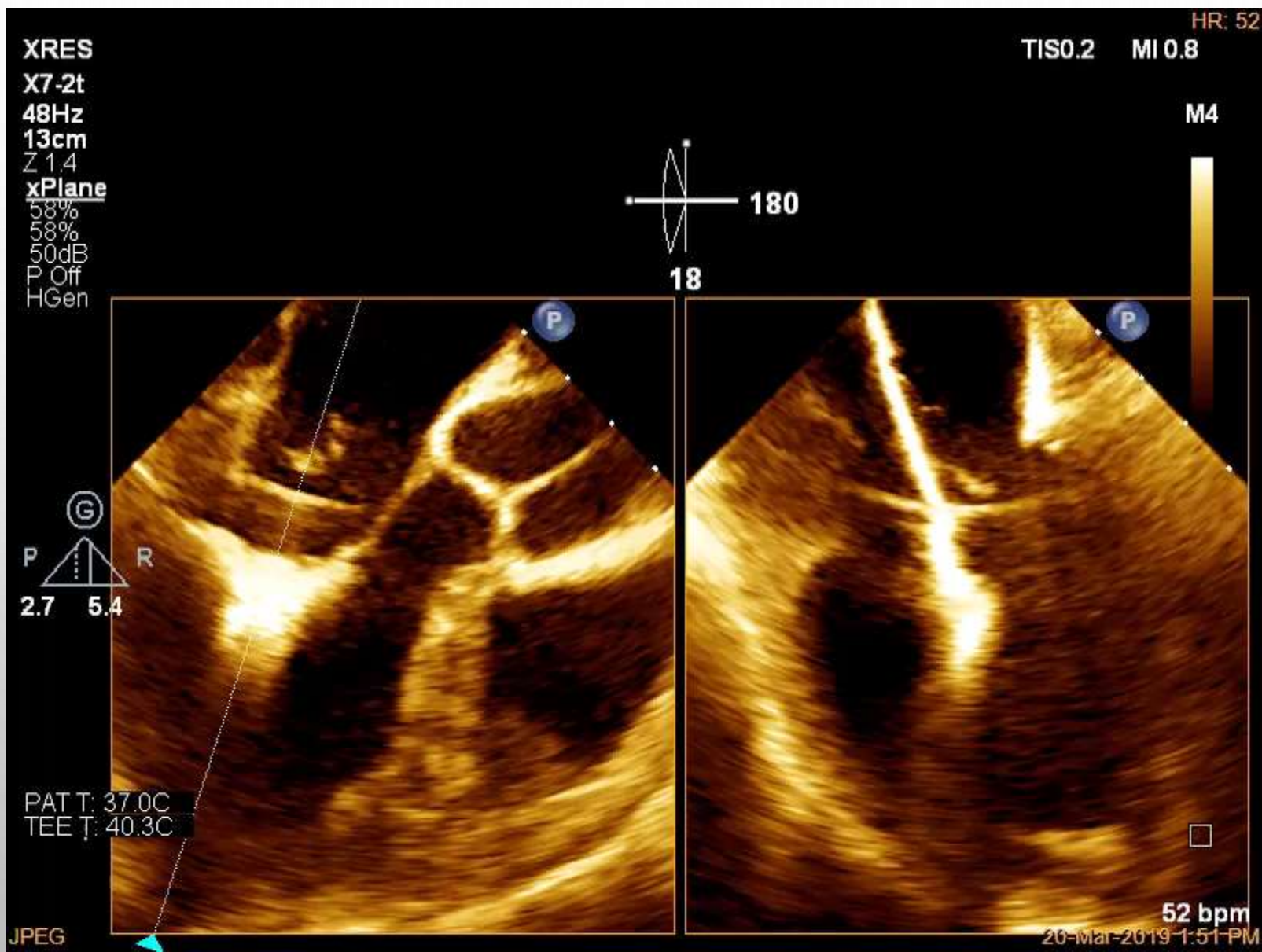
CF
48%
7577Hz
WF 681Hz
4.4MHz



PROLAPS



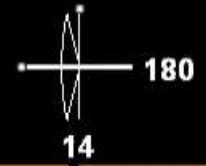
PROLAPS



XRES
X7-2t
13Hz
11cm
Z 1.1
xPlane
60%
60%
50dB
P Off
HGen

TIS0.7 MI 0.5 HR: 54

M4M4
+59.3
-59.3
cm/s

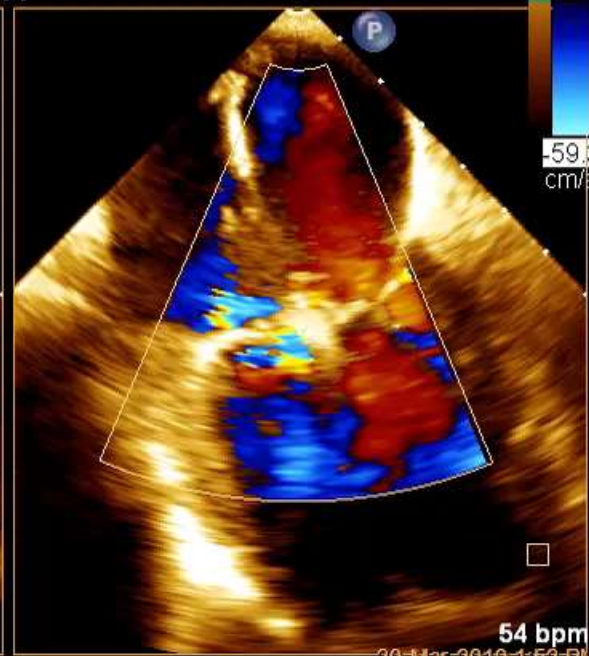
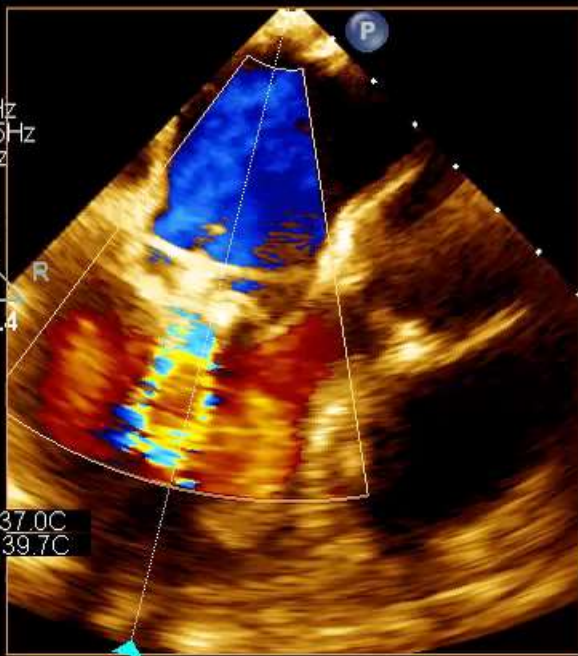


CF
48%
6838Hz
WF 615Hz
4.4MHz



PAT T: 37.0C
TEE T: 39.7C

JPEG



54 bpm
20-Mar-2019-1:52 PM

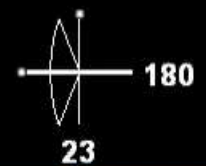
PROLAPS

XRES
X7-2t
13Hz
10cm

TIS0.7 MI 0.5 HR: 51

xPlane
59%
59%
50dB
P Off
HGen

M4M4
+59.3
-59.3
cm/s

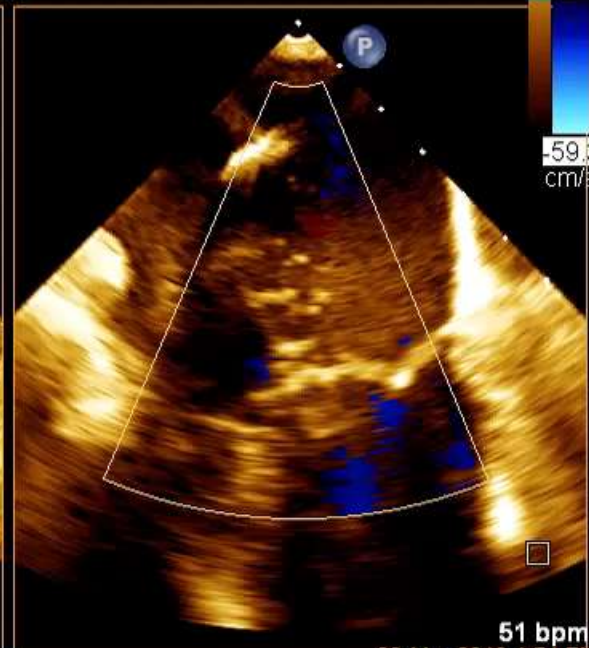


CF
48%
6838Hz
WF 615Hz
4.4MHz



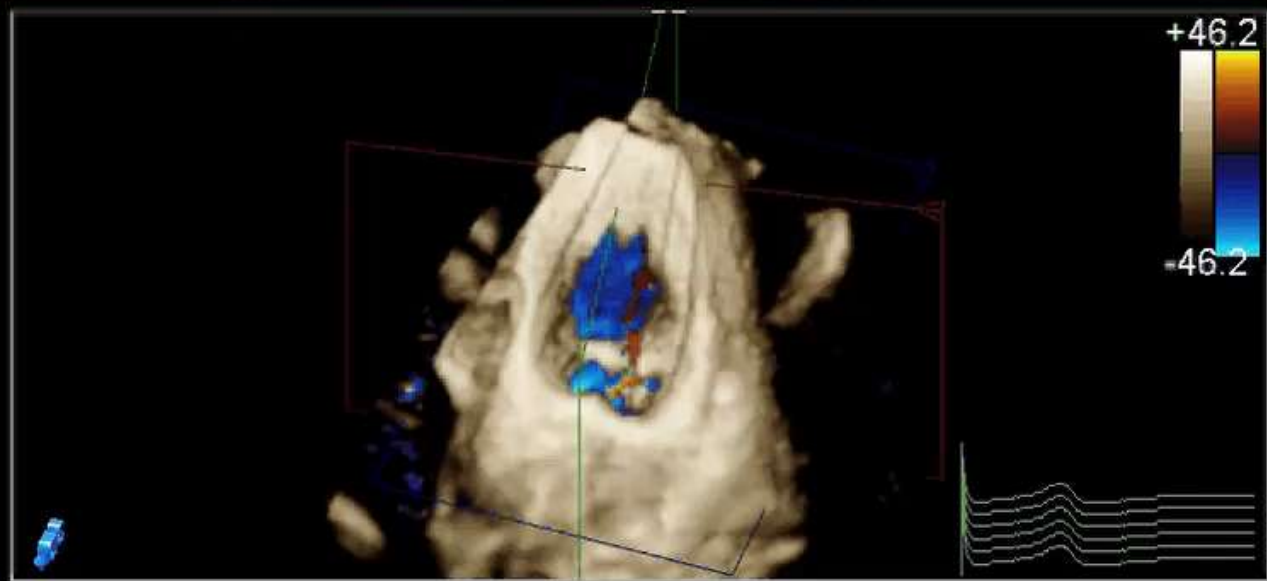
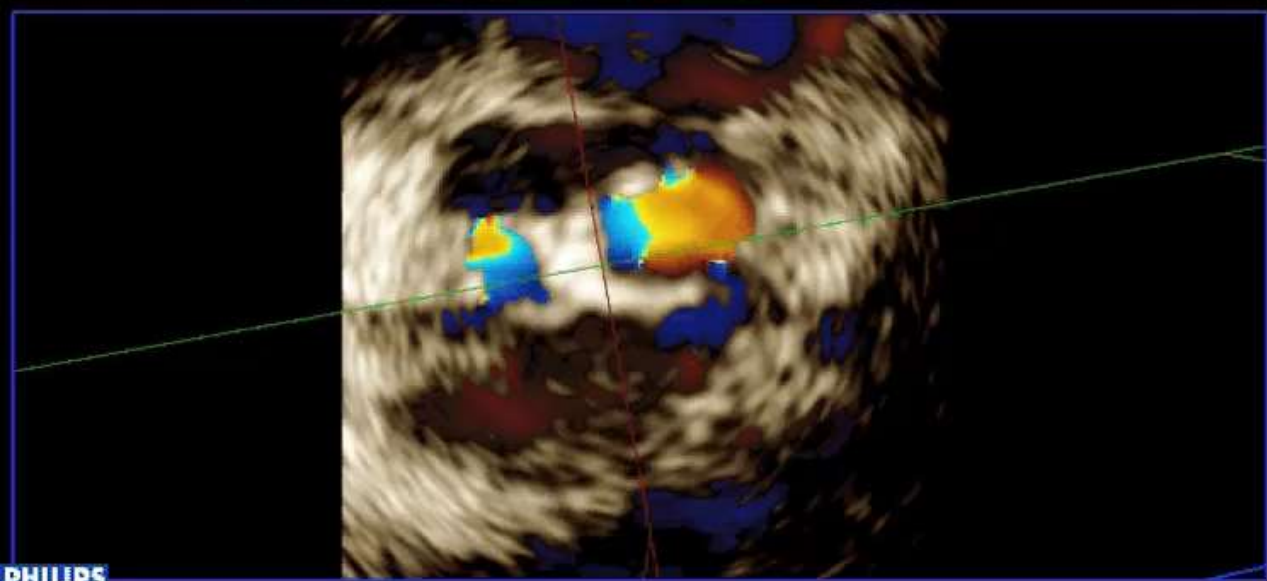
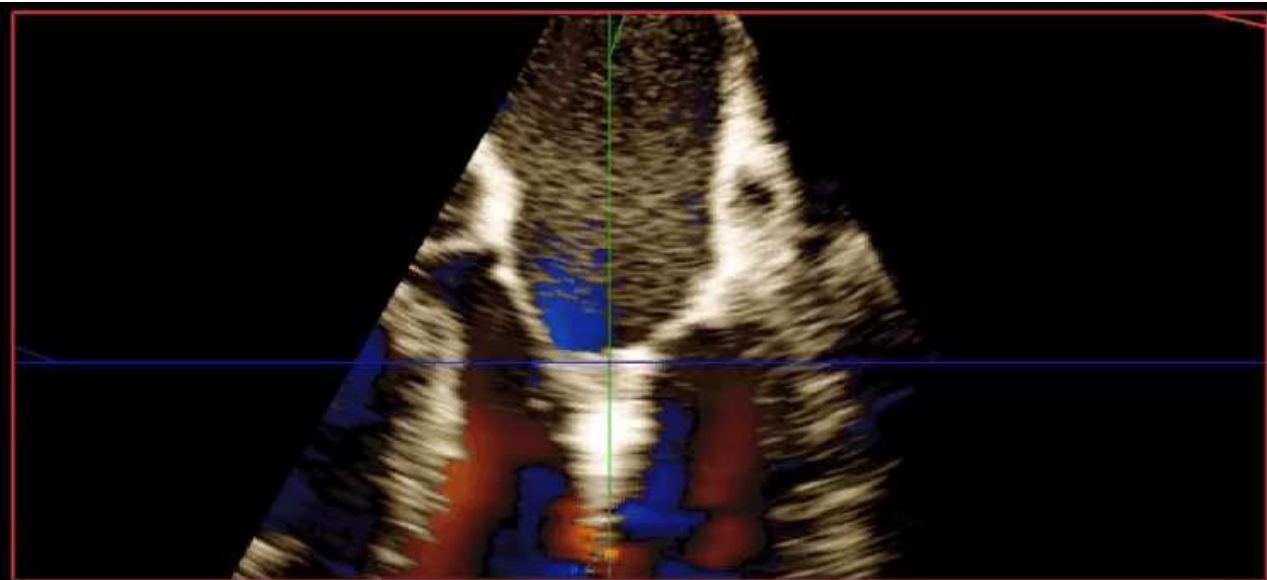
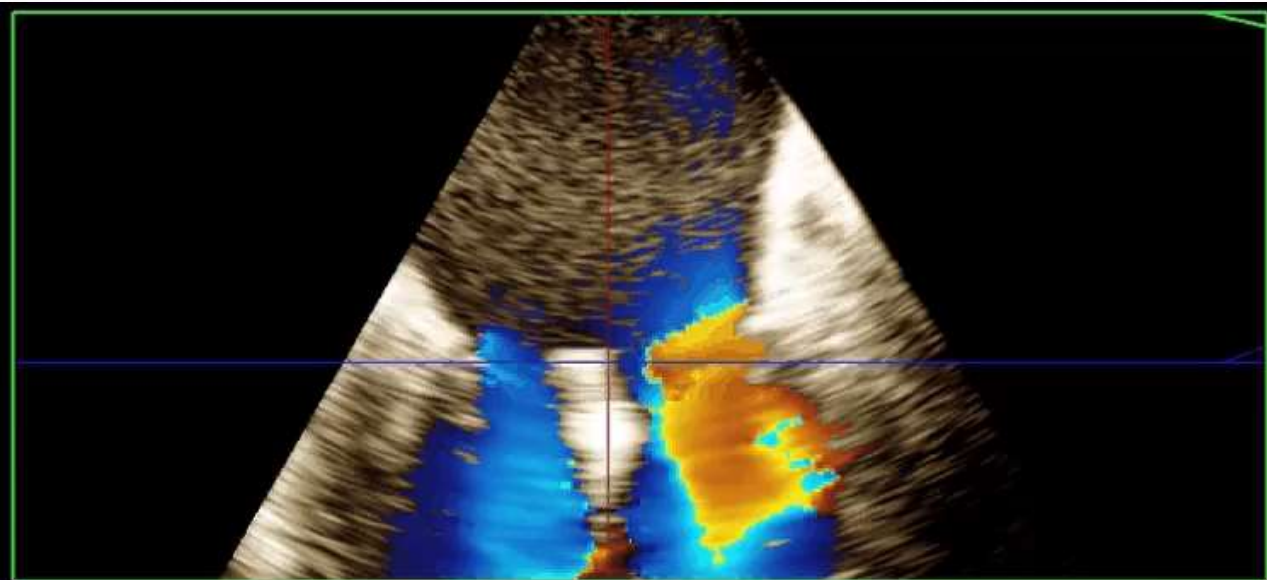
PAT T: 37.0C
TEE T: 39.4C

JPEG

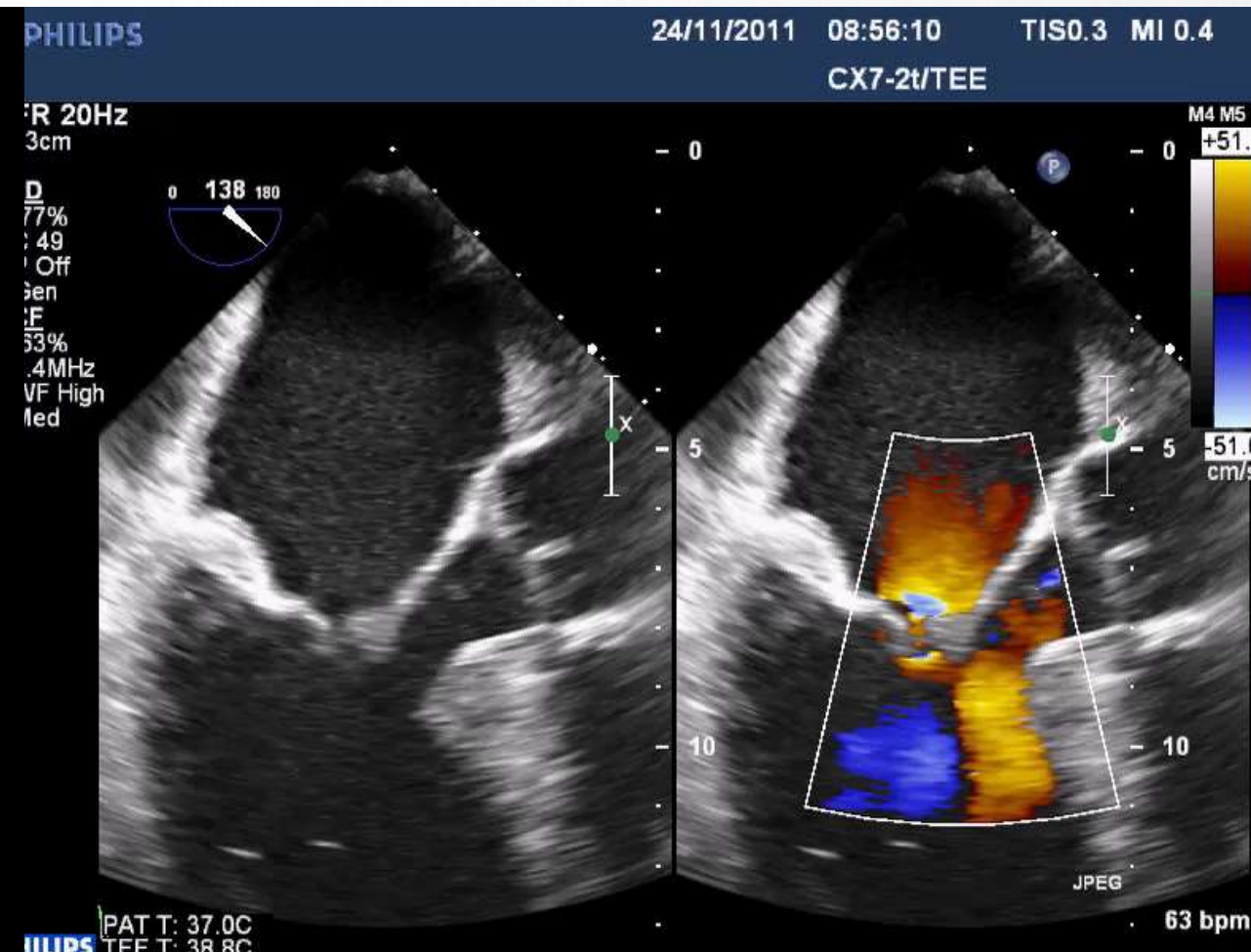
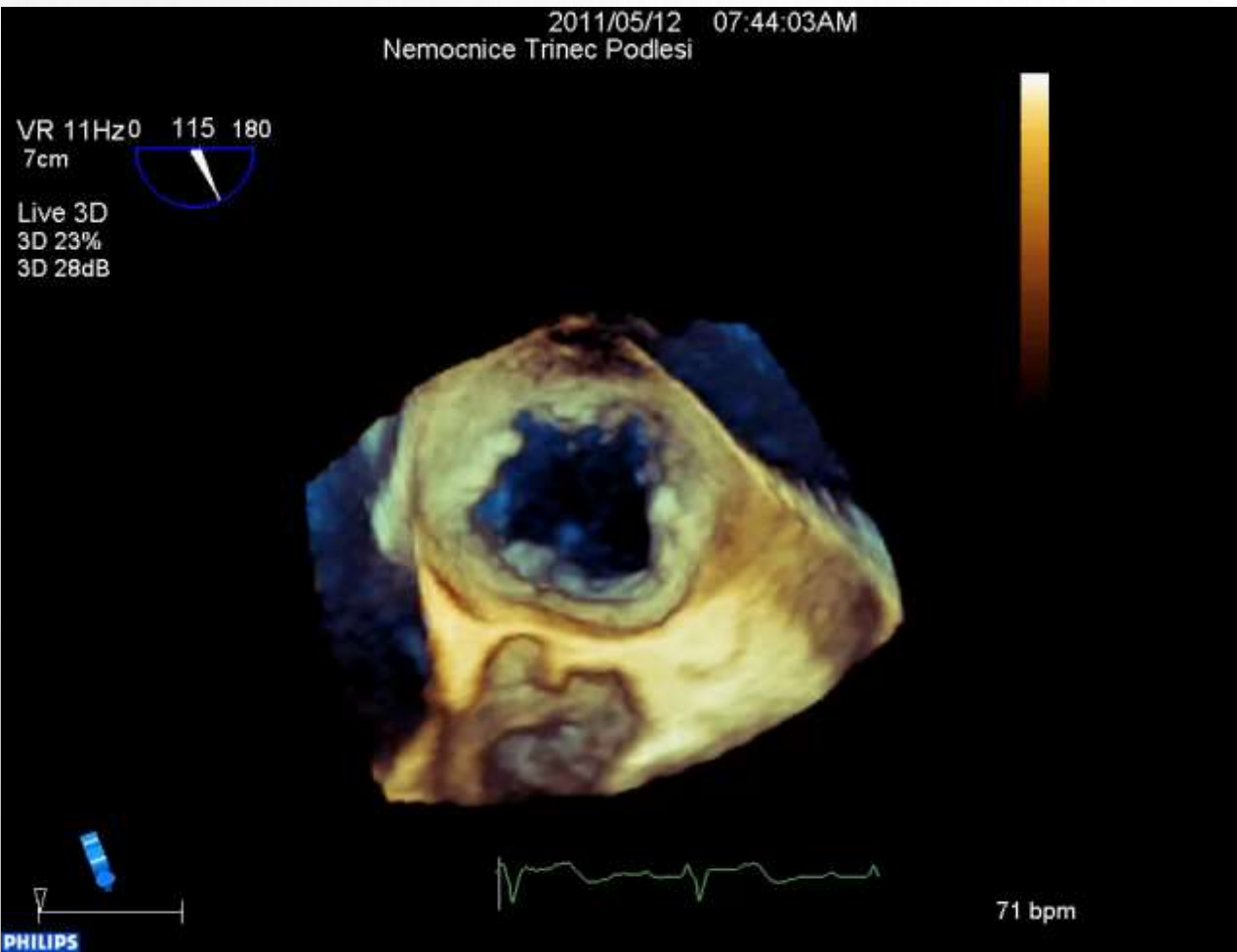


51 bpm
20-Mar-2019-1:54 PM

PROLAPS



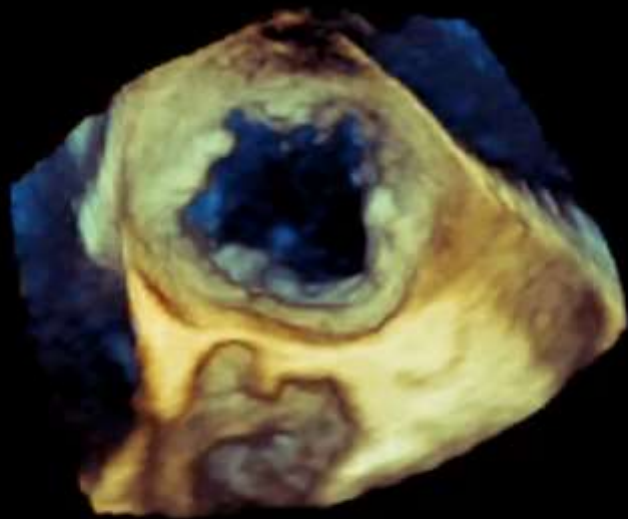
HOČM S KOMISURÁLNÍM PROLAPSEM



HOČM S KOMISURÁLNÍM PROLAPSEM

2011/05/12 07:44:03AM
Nemocnice Trinec Podlesí

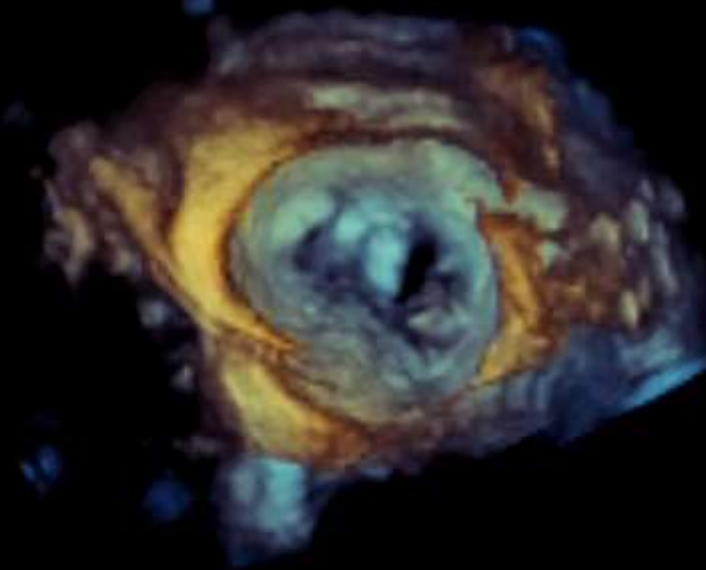
VR 11Hz0 115 180
7cm
Live 3D
3D 23%
3D 28dB



71 bpm

2011/11/24 12:22:23PM
Nemocnice Trinec Podlesí

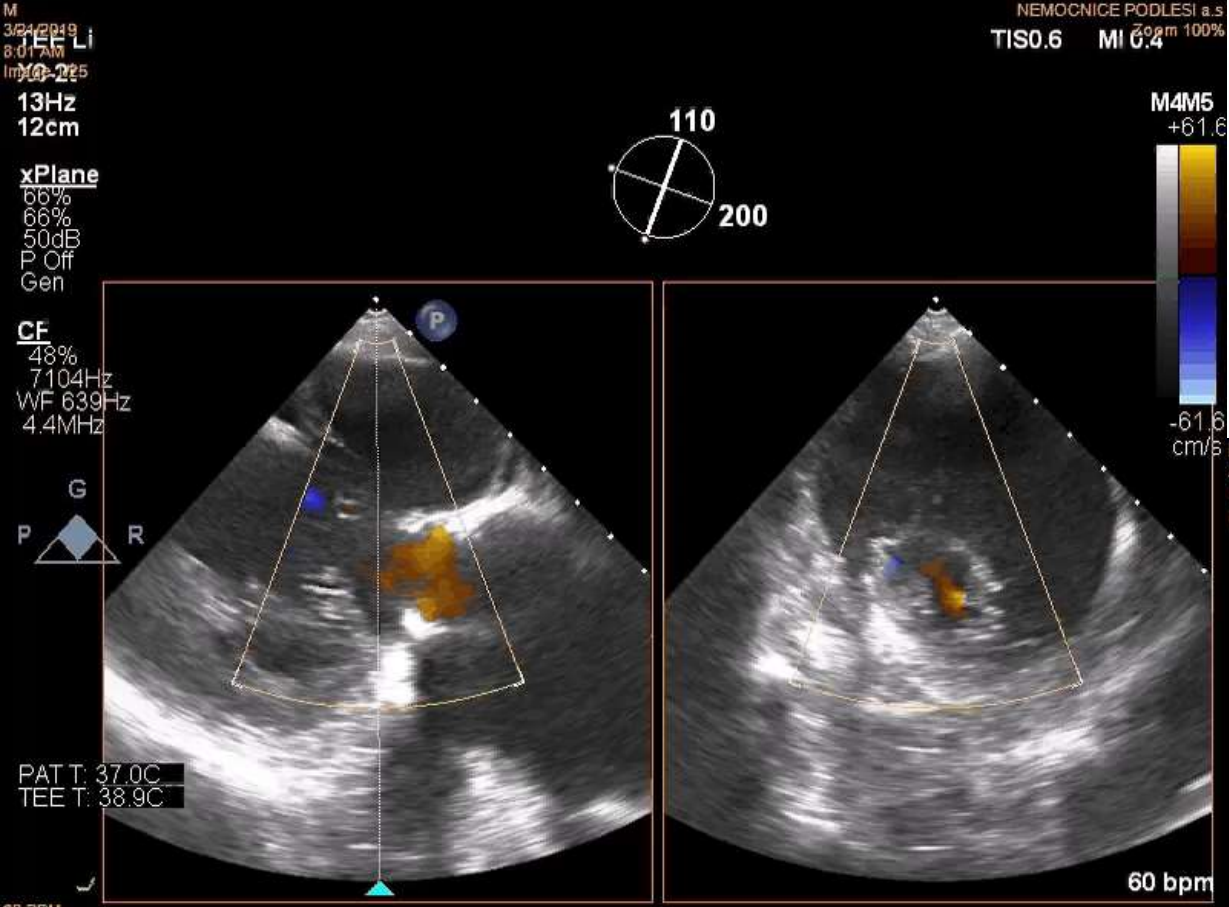
R 22Hz0 0 180
1cm
All Volume
> 2%
> 18dB



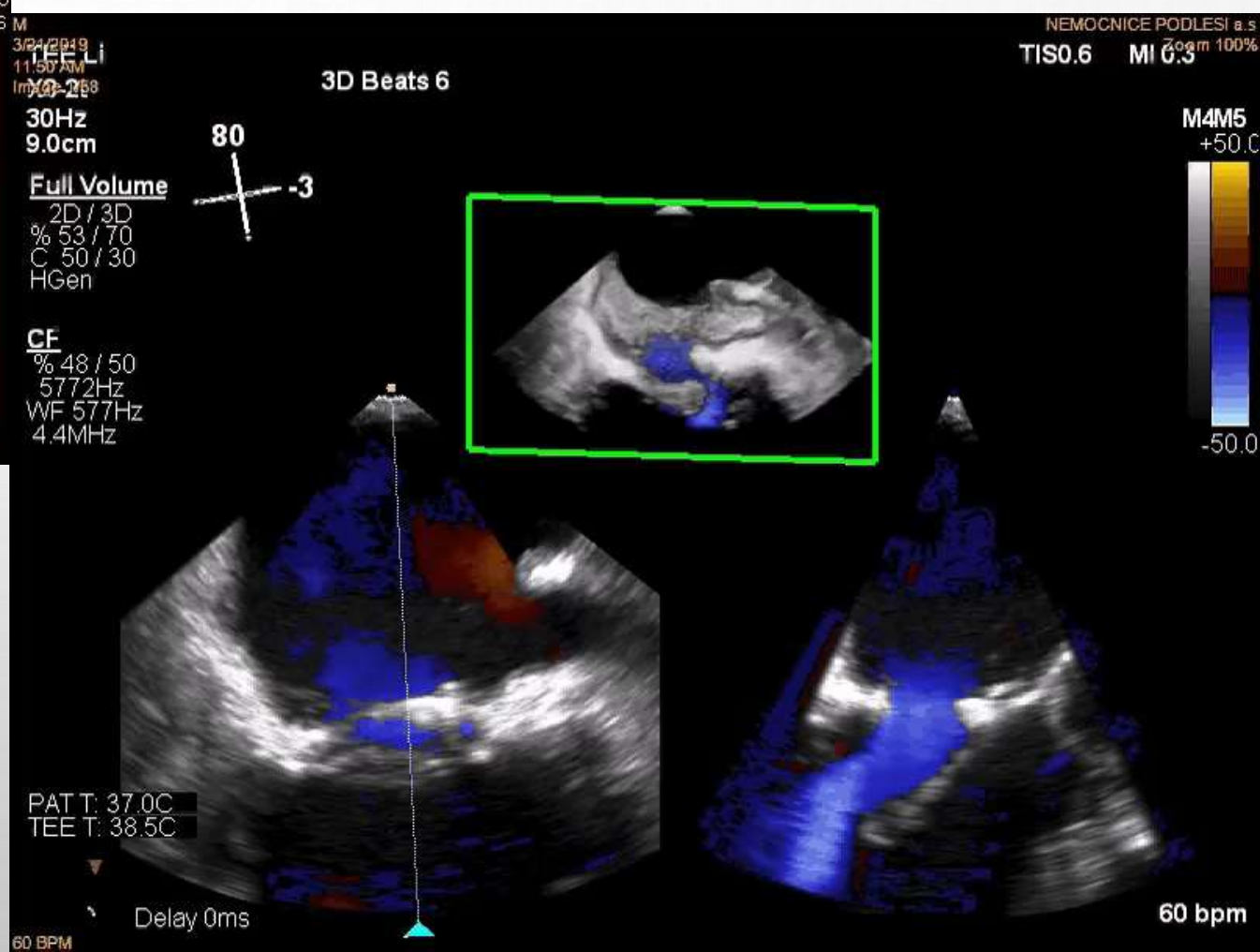
45 bpm

HOČM S KOMISURÁLNÍM PROLAPSEM





CLEFT



3/24/2019
9:58 AM
Im 0-264

NEMOCNICE PODLESI a.s
TISO.1 MI 0.4
Zoom 100%

27Hz
10cm

xPlane
63%
63%
50dB
P Off
HGen

M4



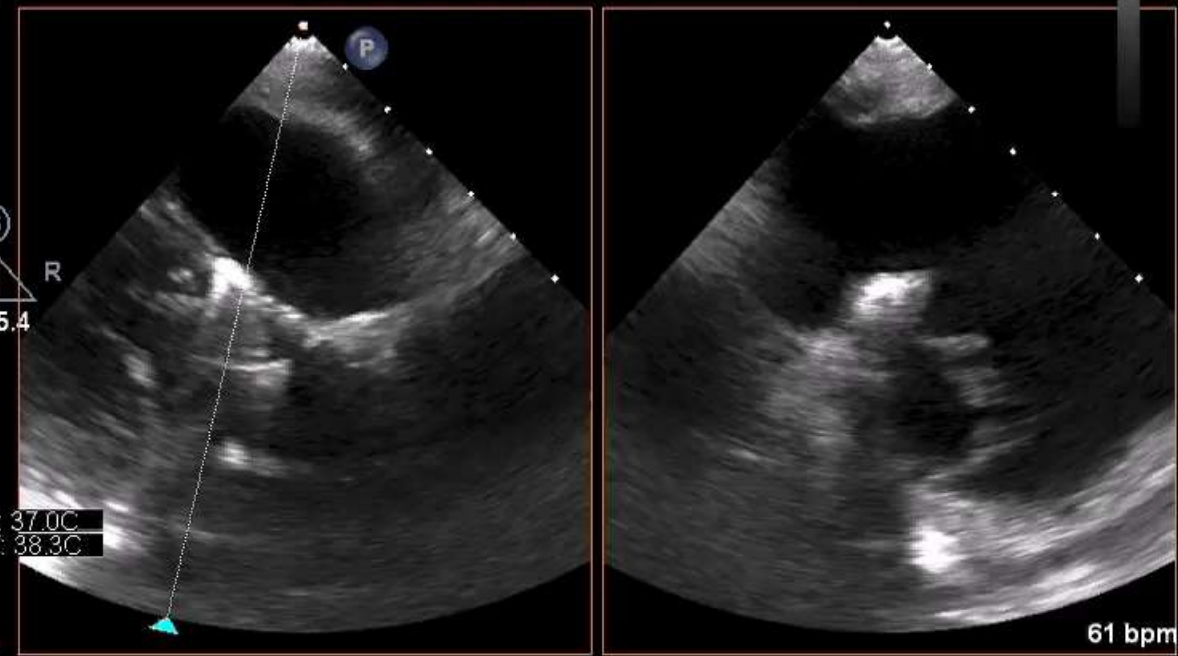
13



2.7 5.4

PAT T: 37.0C
TEE T: 38.3C

61 BPM



61 bpm

CLEFT

M

3/24/2019
9:58 AM
Im 0-267

NEMOCNICE PODLESI a.s
TISO.6 MI 0.4
Zoom 100%

13Hz
10cm

xPlane
65%
65%
50dB
P Off
HGen

M4M5
+50.0



13

CF

48%
5772Hz
WF 519Hz
4.4MHz

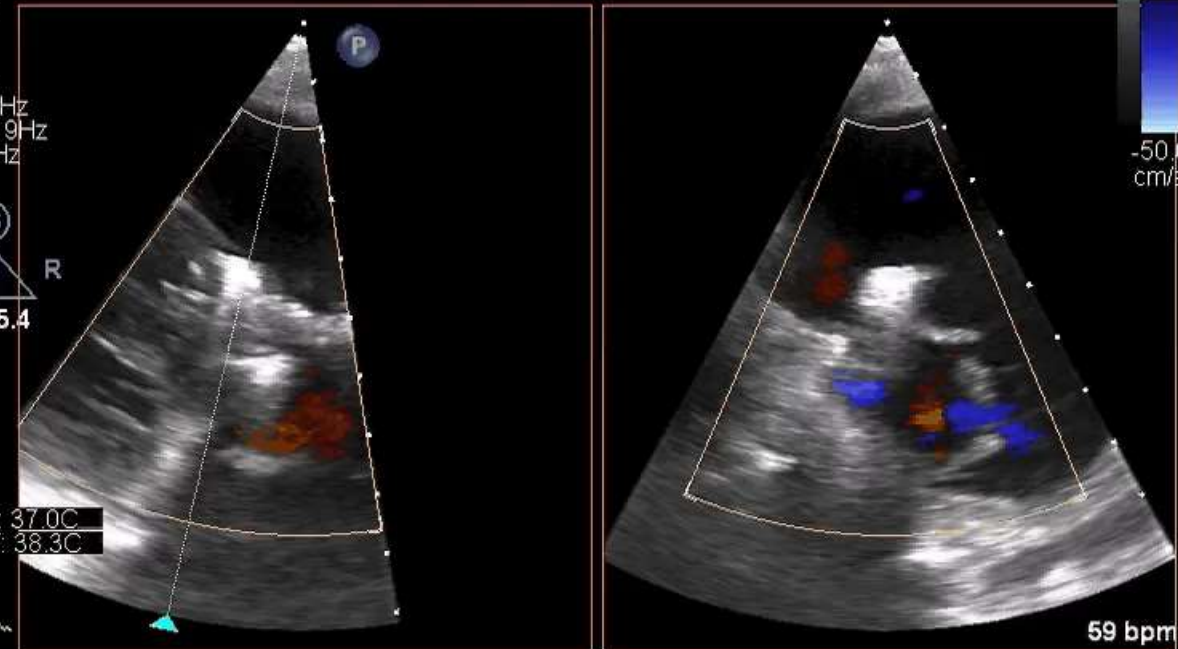
-50.0
cm/s



2.7 5.4

PAT T: 37.0C
TEE T: 38.3C

59 BPM



59 bpm

ZÁVĚR

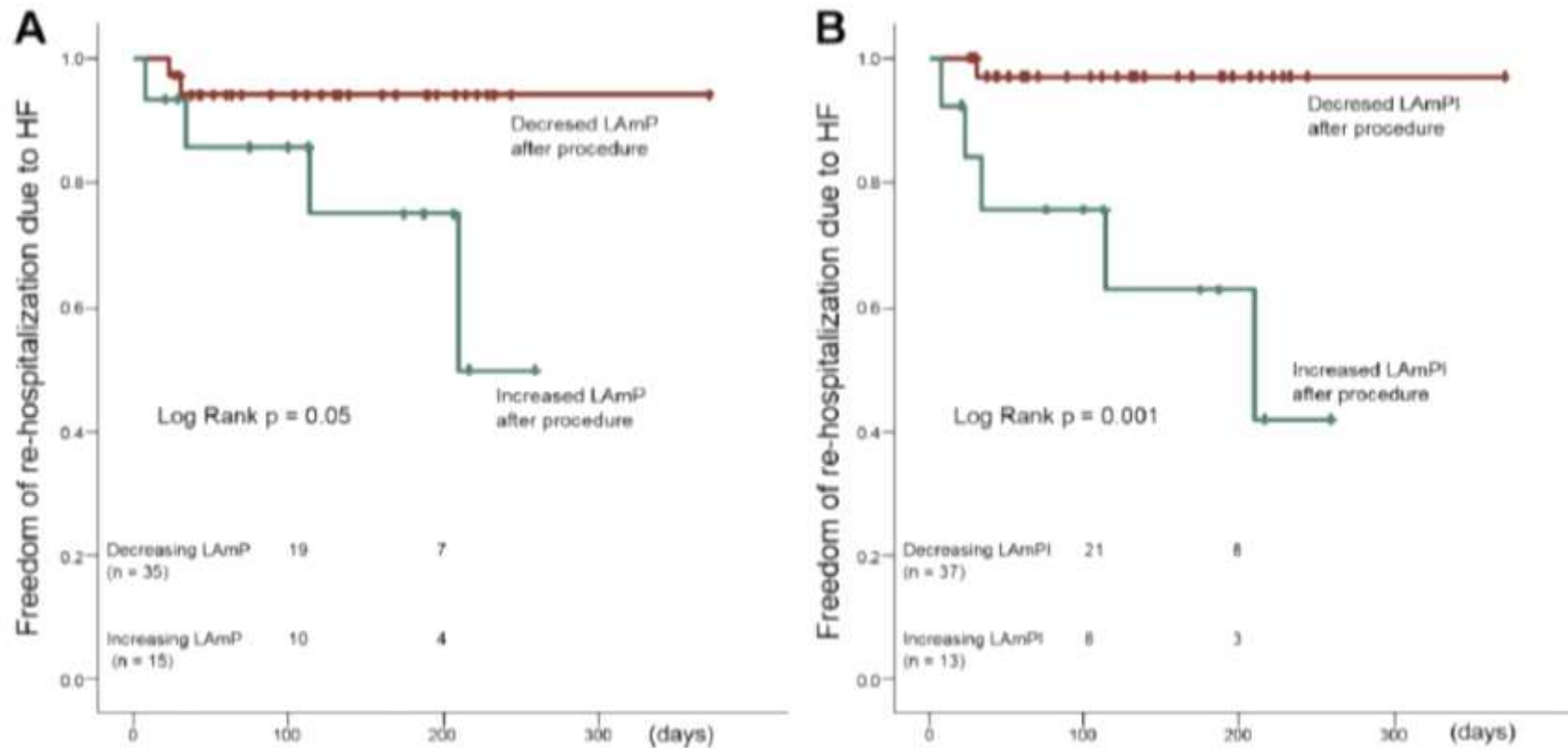
- LÉČBA DEGENERATIVNÍ MITRÁLNÍ REGURGITACE MITRACLIPEM JE EFEKTIVNÍ A DOPLŇUJE CHIRURGICKÉ METODY
- NUTNÝ PEČLIVÝ VÝBĚR PACIENTŮ VHODNÝCH K VÝKONU, VÝSLEDEK VŠAK NEJDE ZCELA PREDIKOVAT
- PO ZAVEDENÍ DELŠÍHO MITRACLIPU (XTR) SE ZLEPŠILY ŠANCE NA VELMI DOBRÝ VÝSLEDEK



**DĚKUJI ZA
POZORNOST**

PREDIKCE DALŠÍHO PŘEŽÍVÁNÍ

FIGURE 2 Freedom From Rehospitalization Due to HF According to Hemodynamic Changes



(A) Kaplan-Meier curves for rehospitalization due to heart failure (HF) according to trend of left atrial mean pressure (LAmP). (B) Kaplan-Meier curves for rehospitalization due to HF according to trend of LAmP index (LAmPI).