STS/EACTS Latin America Cardiovascular Surgery Conference
November 15-17, 2018
Hilton Cartagena | Cartagena, Colombia

The Case for Watchful Waiting in Mitral Valve Regurgitation

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The Society of Thoracic Surgeons EACTS

The case for a heart team?

Declarations

- Consult and Proctor for:
  - Atricure
  - SJM/Abbott

Classes of recomendations

Classes of recommendations	Definition	Suggested wording to use
Class I	Evidence and/or general agreement that a given treatment or procedure is beneficial, useful, effective.	Is recommended/is indicated
Class II	Conflicting evidence and/or a divergence of opinion about the usefulness/efficacy of the given treatment or procedure.	
Class IIa	*Weight of evidence/opinion is in favour of usefulness/efficacy.*	Should be considered
Class IIb	*Usefulness/efficacy is less well established by evidence/opinion.*	May be considered
Class III	Evidence or general agreement that the given treatment or procedure is not useful/effective, and in some cases may be harmful.	Is not recommended

Levels of evidence

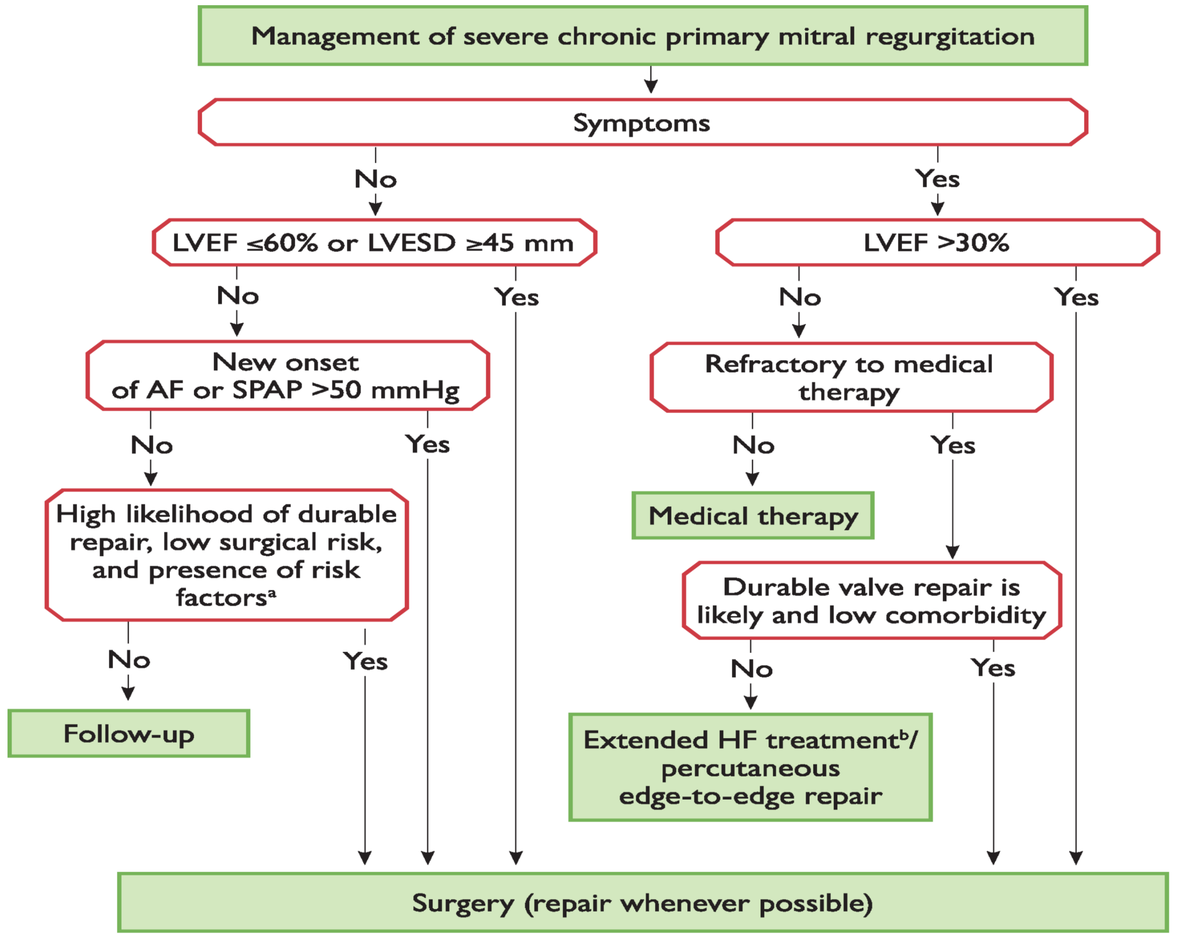
Level of evidence A	Data derived from multiple randomized clinical trials or meta-analyses.
Level of evidence B	Data derived from a single randomized clinical trial or large non-randomized studies.
Level of evidence C	Consensus of opinion of the experts and/or small studies, retrospective studies, registries.

What do the guidelines say?

I B

IIa B

IIa C



I B

IIb C

IIb C

From: 2017 ESC/EACTS Guidelines for the management of valvular heart disease
Eur Heart J. 2017;38(36):2739-2791. doi:10.1093/eurheartj/ehx391

Severity

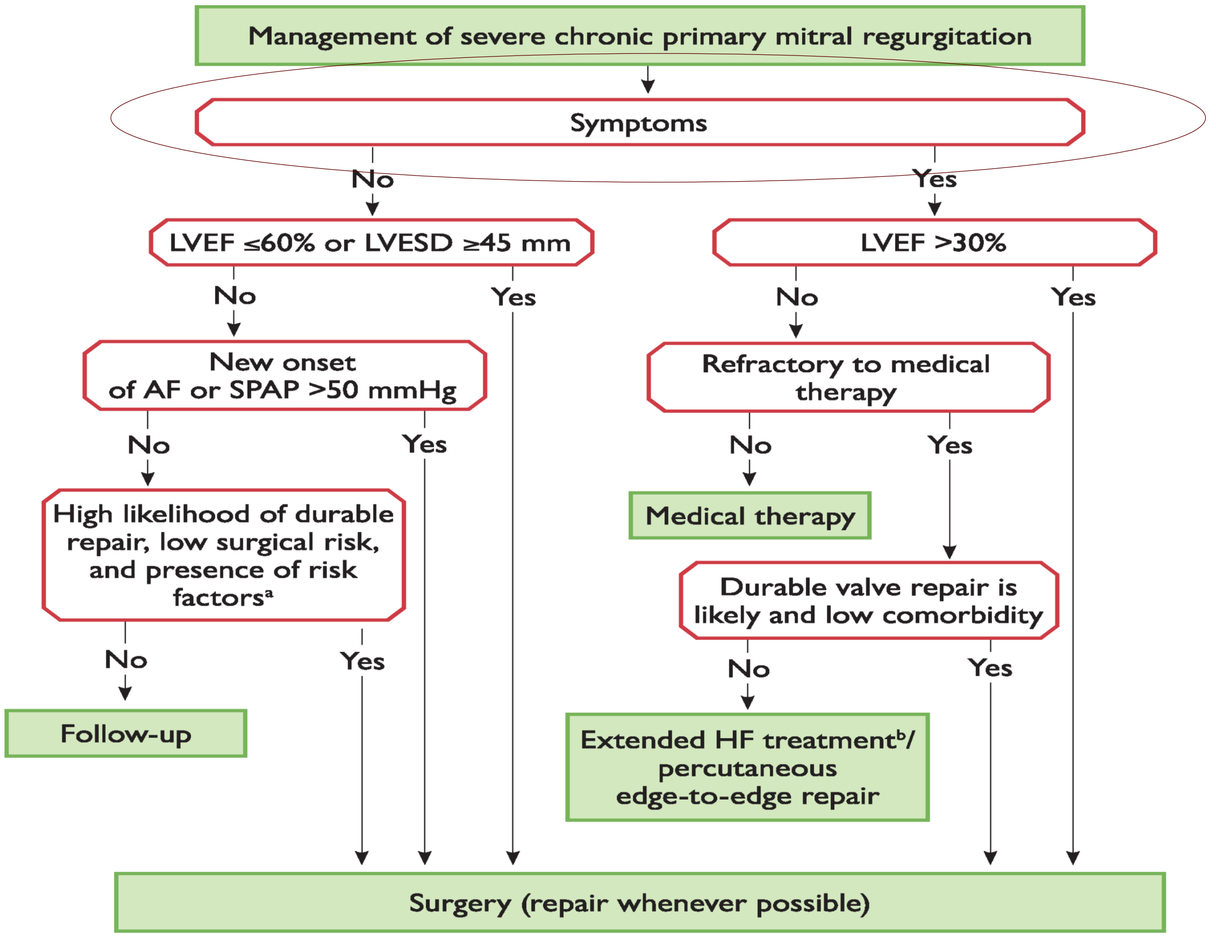
	Mitral regurgitation	
Qualitative		
Valve morphology	Flail leaflet/ruptured papillary muscle/ large coaptation defect	
Colour flow regurgitant jet	Very large central jet [illegible] adhering, swirling and reaching t[illegible] [illegible] wa[illegible] LA	
CW signal of regurgitant jet	D[illegible]se/trian[illegible]	
Other	Large flow convergence zone[a]	
[illegible]itative		
Vena contracta [illegible] (mm)	≥7 (>8 for biplane)[b]	
Upstream vein flow[c]	Systolic pulmonary vein flow reversal	
Inflow	E-wave dominant ≥1.5 m/s[d]	
Other	TVI mitral/TVI aortic >1.4	
Quantitative	Primary	Secondary[b]
EROA (mm^2)	≥40	≥20
Regurgitant volume (mL/beat)	≥60	≥30
+ enlargement of cardiac chambers/vessels	LV, LA	

TTE vs TEE

TEE

- Essential to confirm the mechanism of mitral valve regurgitation
  - assess repairability
- Better than TTE when analyzing eccentric regurgitation jets

What do the guidelines say?



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Symptoms

- Dyspnoea
  - NYHA not appropriate for physically fit patients
  - Would a modified EHRA Classification for AF be applicable to these patients?

European Heart Rhythm Association
Symptom Classification for Atrial Fibrillation

Table I Modified EHRA (mEHRA) classification

mEHRA score	Symptoms	Description
1	None	
2a	Mild	Normal daily activity not affected, symptoms not troublesome to patient
2b	Moderate	Normal daily activity not affected but patient troubled by symptoms
3	Severe	Normal daily activity affected
4	Disabling	Normal daily activity discontinued

Underlined text represents the modification to the original descriptions of EHRA classes.

Europace (2014) 16, 965–972
doi:10.1093/europace/eut395

Symptoms

- Dyspnoea
  - NYHA not appropriate for physically fit patients
  - Would a modified EHRA Classification for AF be applicable to these patients?
- Fatigue
  - A very common symptom
- Decrease in exercise tolerance
  - Important in physically active patients
- Palpitations
  - Requires investigation
  - Should Holter monitoring be part of follow up?

The Sheffield approach

- All cases are discussed at the by the mitral (AV valve) team
  - All mitral surgeons
  - All imaging cardiologists
  - Any other surgeon/cardiologist with a patient with MR
    - Heart failure team
    - ICC team
    - Aortovascular team
    - EP team
- 6 month TTE (if severity and mechanism has been confirmed with TEE)
  - Consider exercise TTE
- Lower threshold for surgery if the valve is the repairable and/or the patient is suitable for MIS

Conclusions

- The principles of Watchful Waiting provide a clear guideline for your institution
- Initial TEE to assess mechanism and confirm severity
- Regular follow up to assess symptoms
- TTE can be used for follow up assessment but consider exercise TTE to assess change in systollic PAP if there has been a change in the resting PAP
- Any history of palpitations: Look hard for atrial fibrillation
- All cases discussed with the mitral valve heart team

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THANK YOU