Quando è appropriata la correzione cardiochirurgica nell'insufficienza mitralica reumatica. Le tecniche riparative

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EcoCardioChirurgia

- The determination of MR's etiology is important for
  - Long-term prognosis
  - Expeted complexity of the operation
  - Proper medical therapy preceding or following valve surgery
- Factors contributing to determining etiology
  - Age
  - Medical history
  - Geographical considerations
  - Socioeconomics conditions
  - Clinical presentation

SECONDARY LESIONS MAY MASK THE CHARACTERISTIC PATHOLOGICAL FEATURES AND THEREFORE CONFUSE RECOGNITION OF THE PRIMARY ETIOLOGY

«Le rheumatisme articulaire aigu entre par la gorge, lèche les articulations et mord le coeur»

Jean-Baptiste Bouillaud

- Before 1950 rheumatic fever was one of the most common epidemics in the world, with considerable socioeconomics consequences.
- Dramatic changes took place when in the mid-1940s sulfanilamides were found to be efficient in the treatment of streptococcal pharyngitis, the cause of rheumatic fever.
- Today the prevalence remains high in developing countries, where progress has been more limited because of unfavorable socioeconomic conditions and the financial burden of prophylaxis.

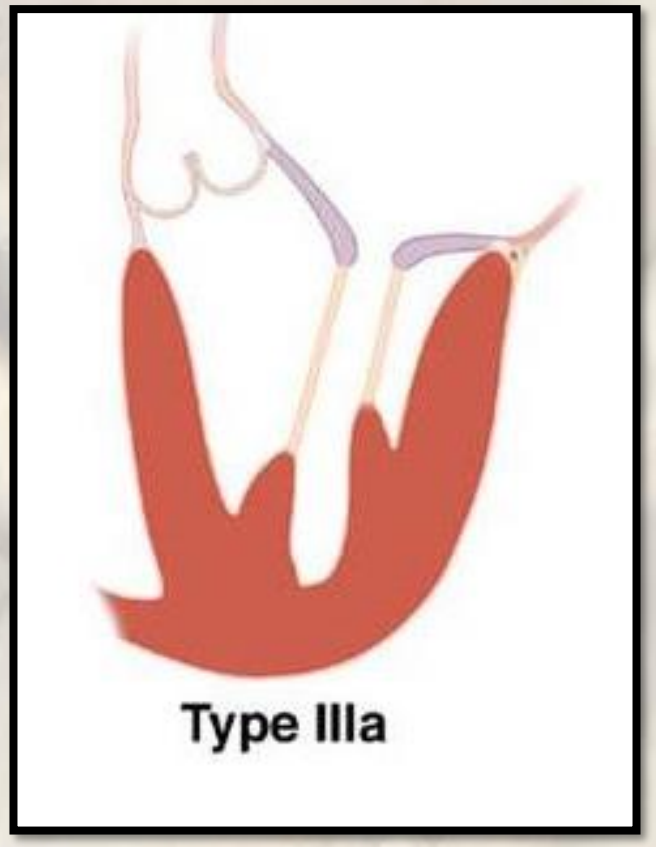
RESTRICTED LEAFLET MOTION

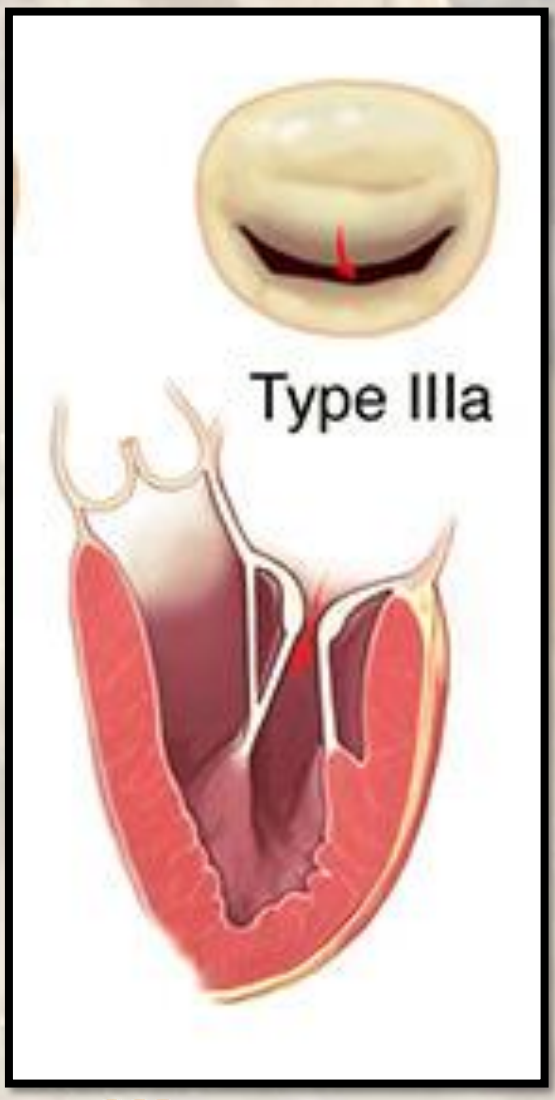
The motion of one or two leaflets is limited during diastole (sometimes also during systole as a result of commisure fusion, cordae thickening and fusion)

Asymmetrical annulus dilatation

Leaflets thickened and indentation are no visible

Anterior leaflet coaptation area is slightly prolapsed, thickened and calcified





Surgical indications

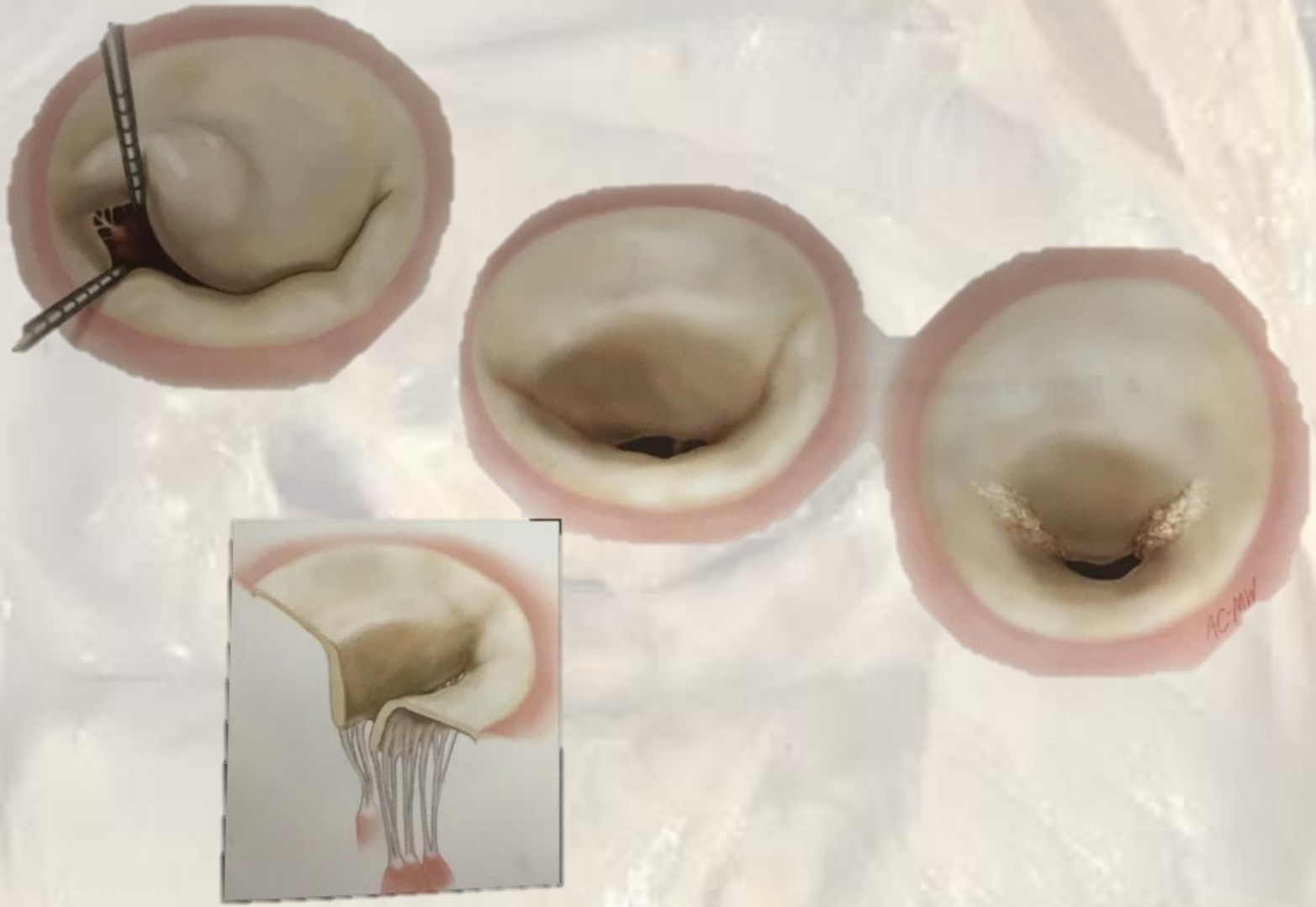
- Acute phase of rheumatic fever (Rare)
  - Valvular surgery is not controindicated in patients with an active rheumatic inflammatory process not responding to medical therapy
- Chronic phase of rheumatic fever
  - In severe MR surgery should be performed before ventricular enlargement or the onset of atrial fibrillation.
  - Likelihood of valve reconstruction

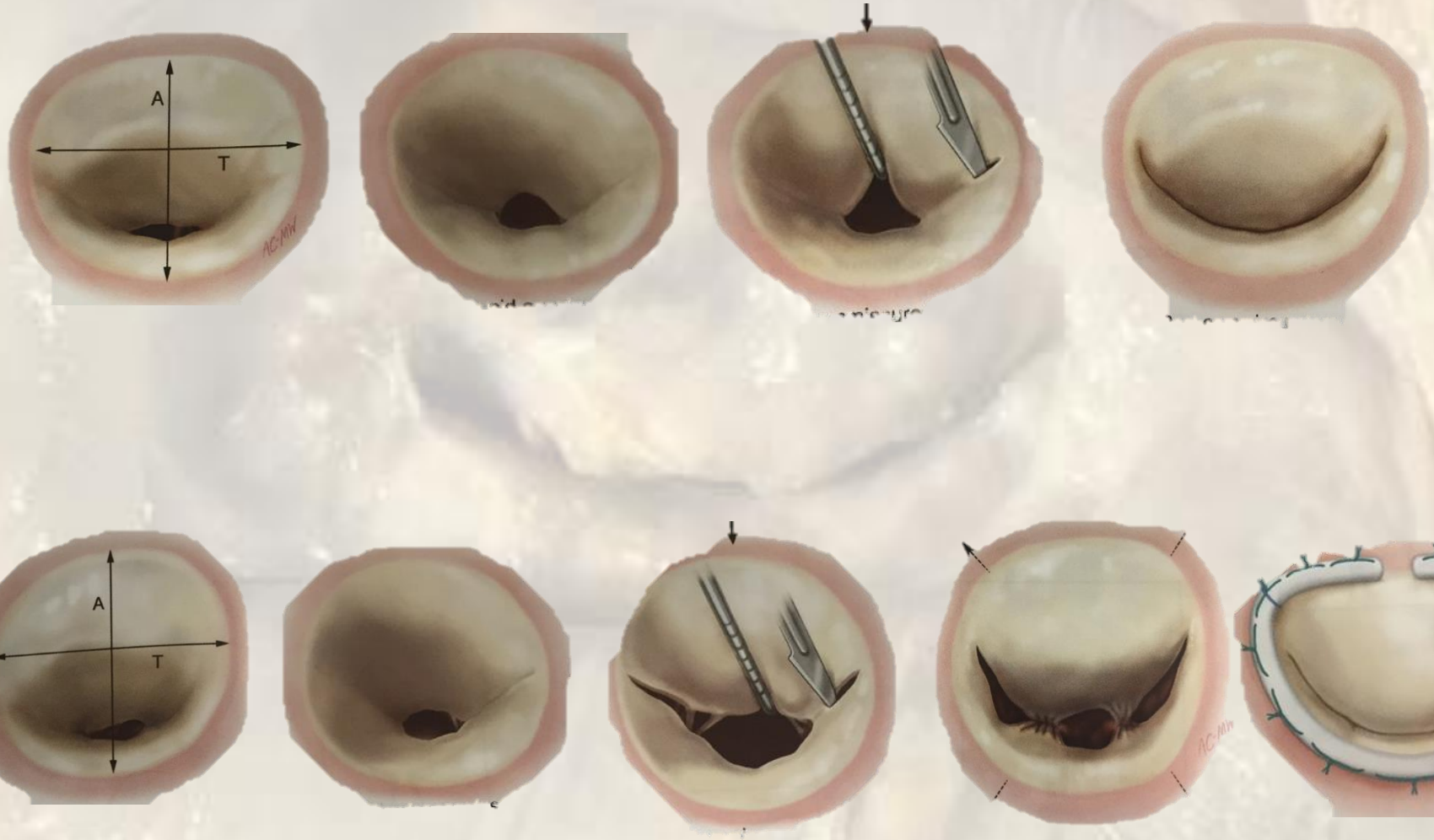
PRINCIPLES OF VALVE RECONSTRUCTION

- Preserve or restore normal leaflet motion
- Create a large surface coaptation
- Remodel and stabilize the annulus

Step by step

1. Inventory if the lesion responsible for the valve dysfunction
2. Feasibility
    1. Pliability of the anterior leaflet
    2. Severity of the involvement of the subvalvular apparatus
3. Leaflet mobilization
    1. Extensive commissurotomy
    2. Resection of secondary chordae
    3. Patch enlargement
4. Recognize and correct an associated leaflet prolapse
5. Annuloplasty (large size)
6. Adjunct procedures
    1. Thrombus formation removal
    2. Atrial appendage orifice closure
    3. Atrial reduction by atrioplasty
    4. Surgical AF ablation

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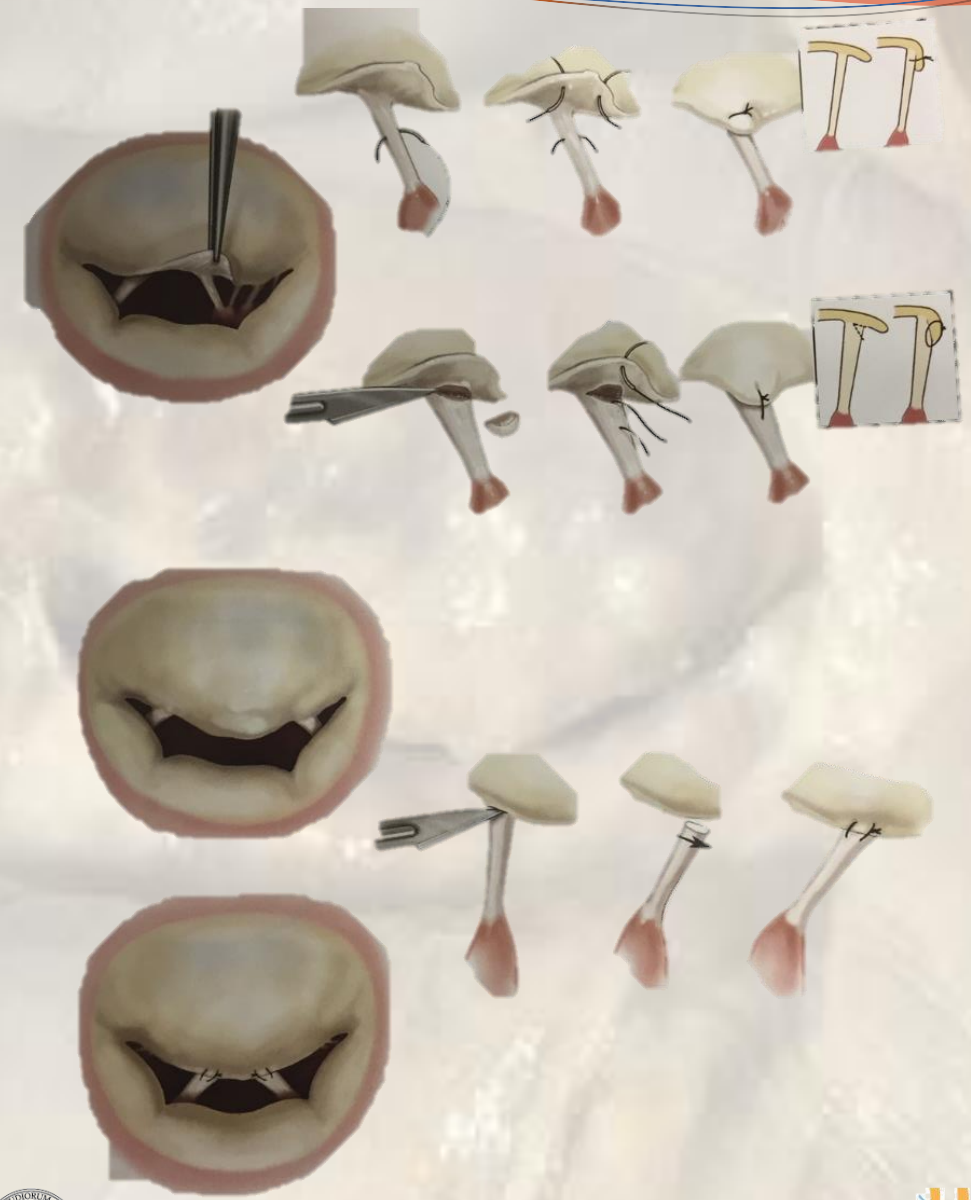

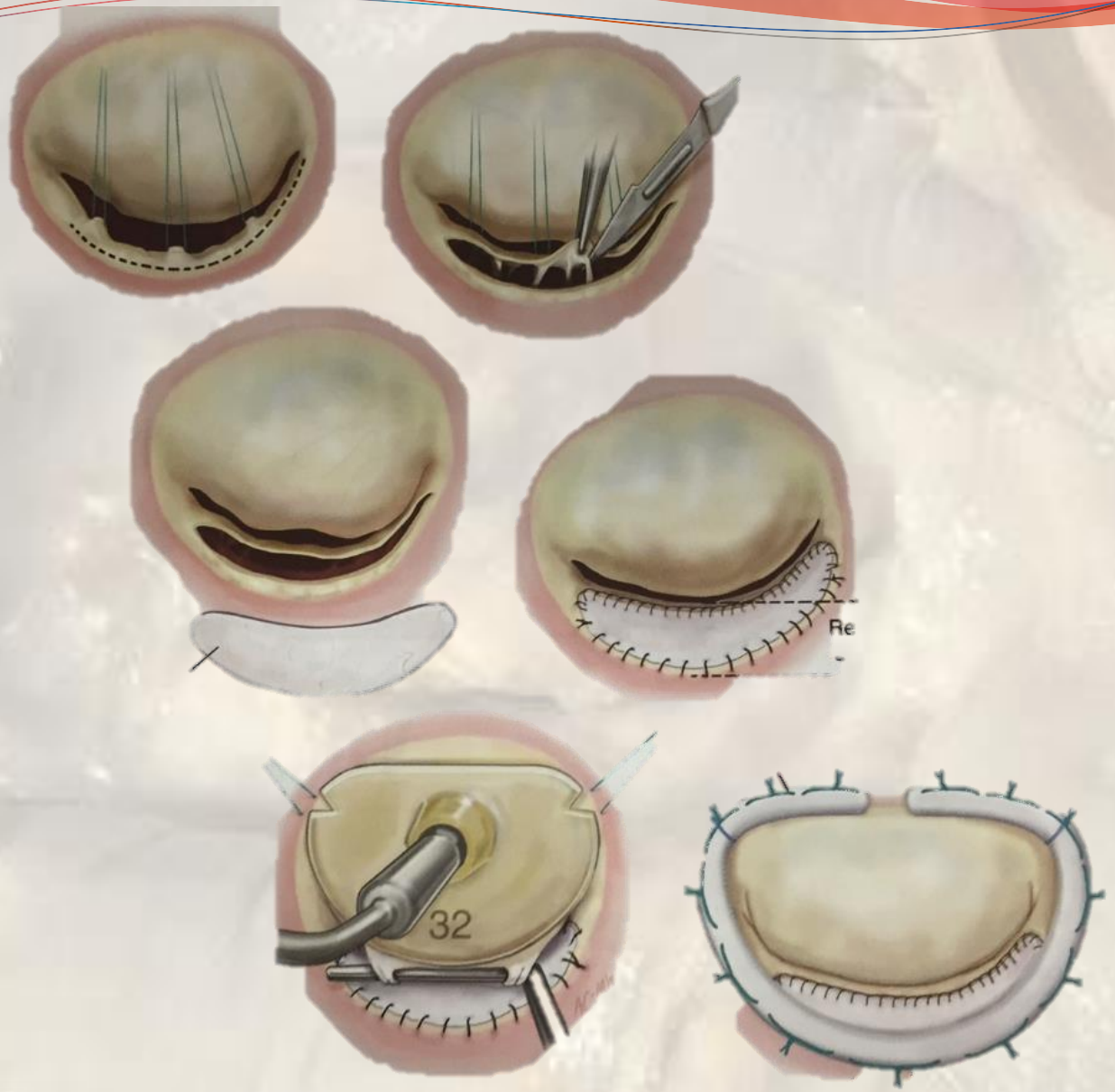
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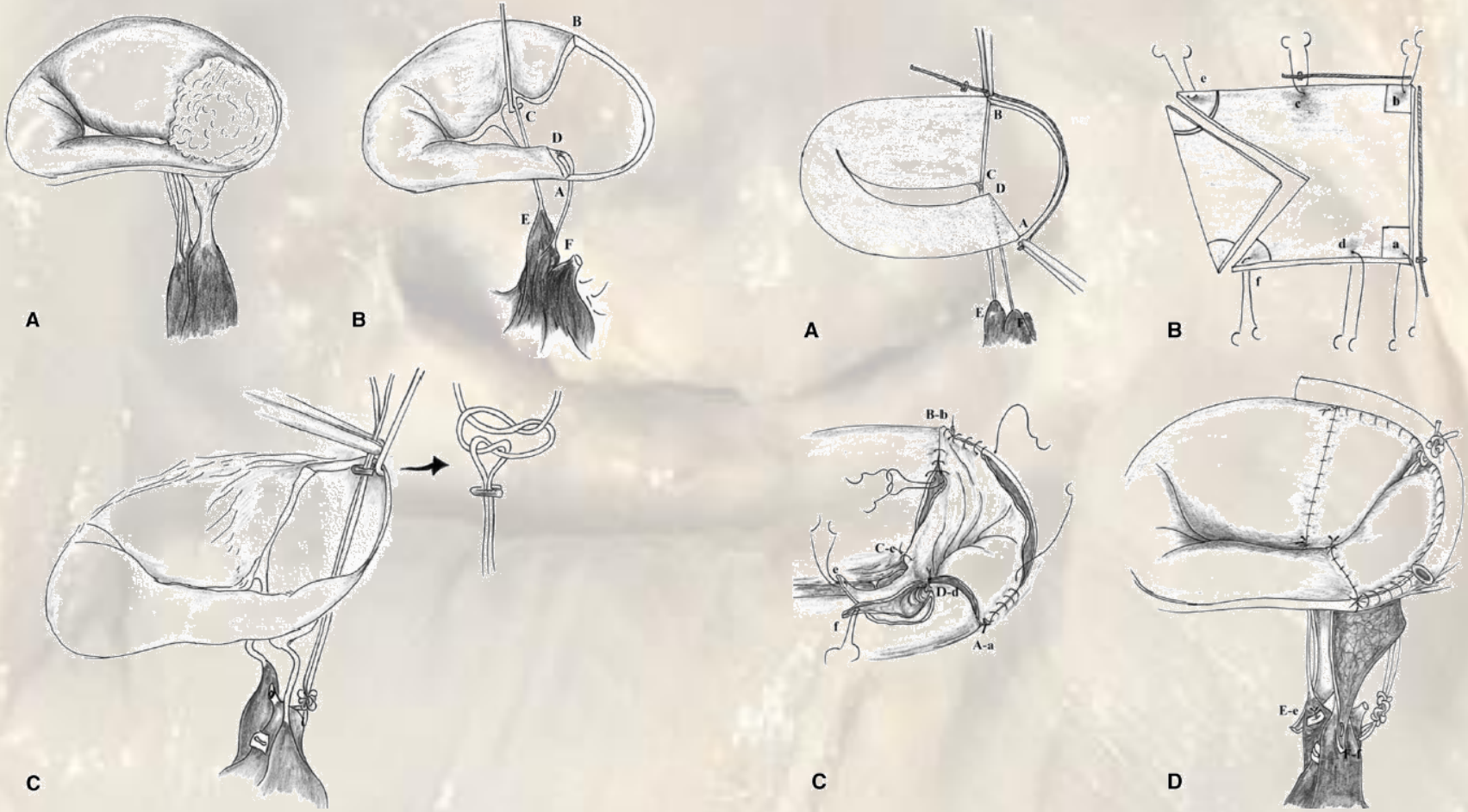
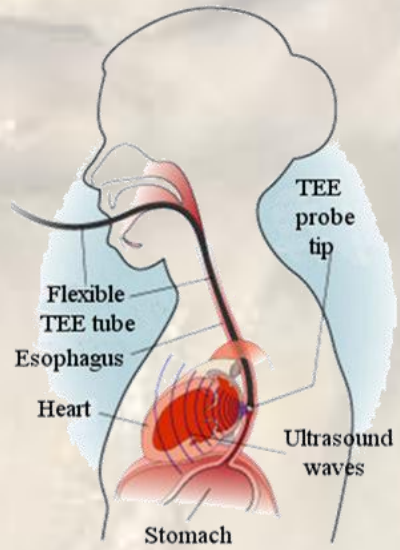
Face-to-face single patch: A new technique to repair the commissures of the mitral valve

Samer Kassem, MD, PhD,[a] Khalid Al-Faraidy, MD,[b] Yasser Elkady, MD,[b] and Ahmad Takriti, MD,[c]
Milan, Italy, Dhahran, Kingdom of Saudi Arabia, and Damascus, Syria



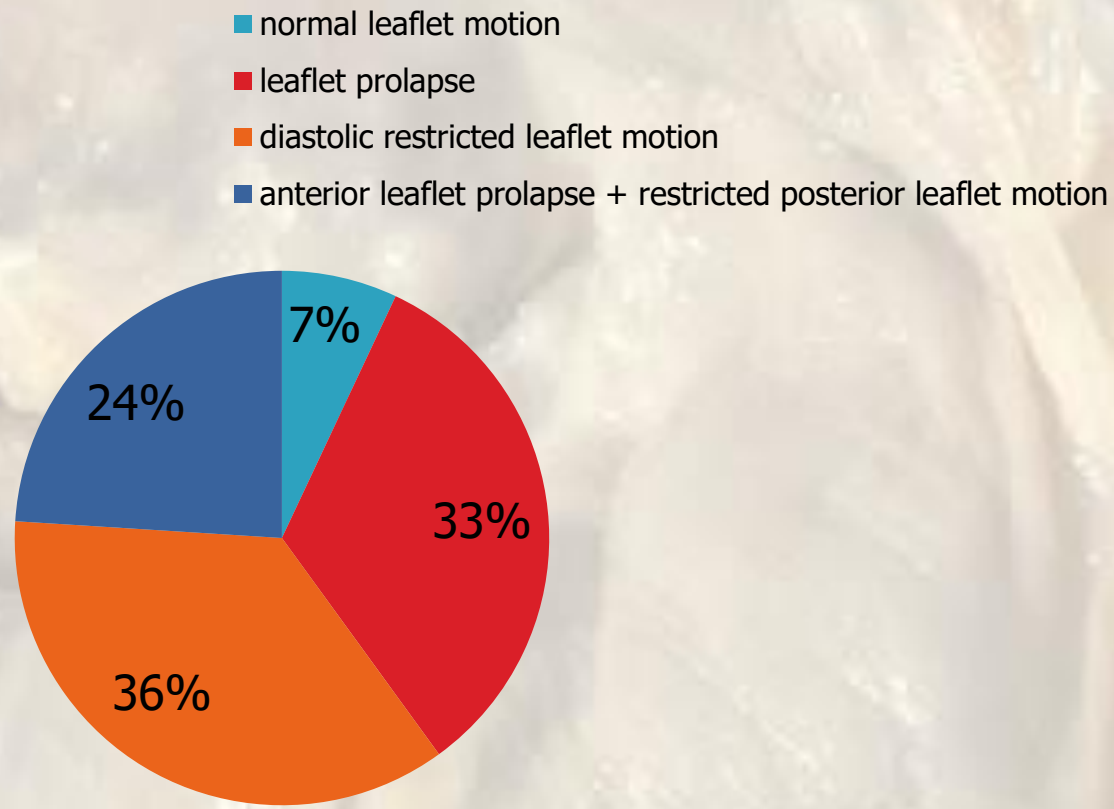
Postoperative TEE

- A mean gradient of 8 mmHg or more should prompt the surgeon to consider possible valve replacement
- A mild degree pf residual mitral regurgitation is accetable provided that a good surface of coaptation has been restored



Results

- 951 pts treated between 1970 and 1994; F-U 7-29Ys
- Age 25.8±18 ys
- Acute Phase 4%



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Circulation. 2001; 104[suppl I]:I-12-I-15

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Results

TABLE 2. Surgical Techniques

	n (%)
Carpentier ring	899 (95)
Chordae shortening	717 (75)
Chordal transfer	99 (10)
Commissurotomy	373 (39)
Pericardial extension	65 (7)

In-hospital mortality 2%

Survival 10ys 89±19%

20ys 82±18%

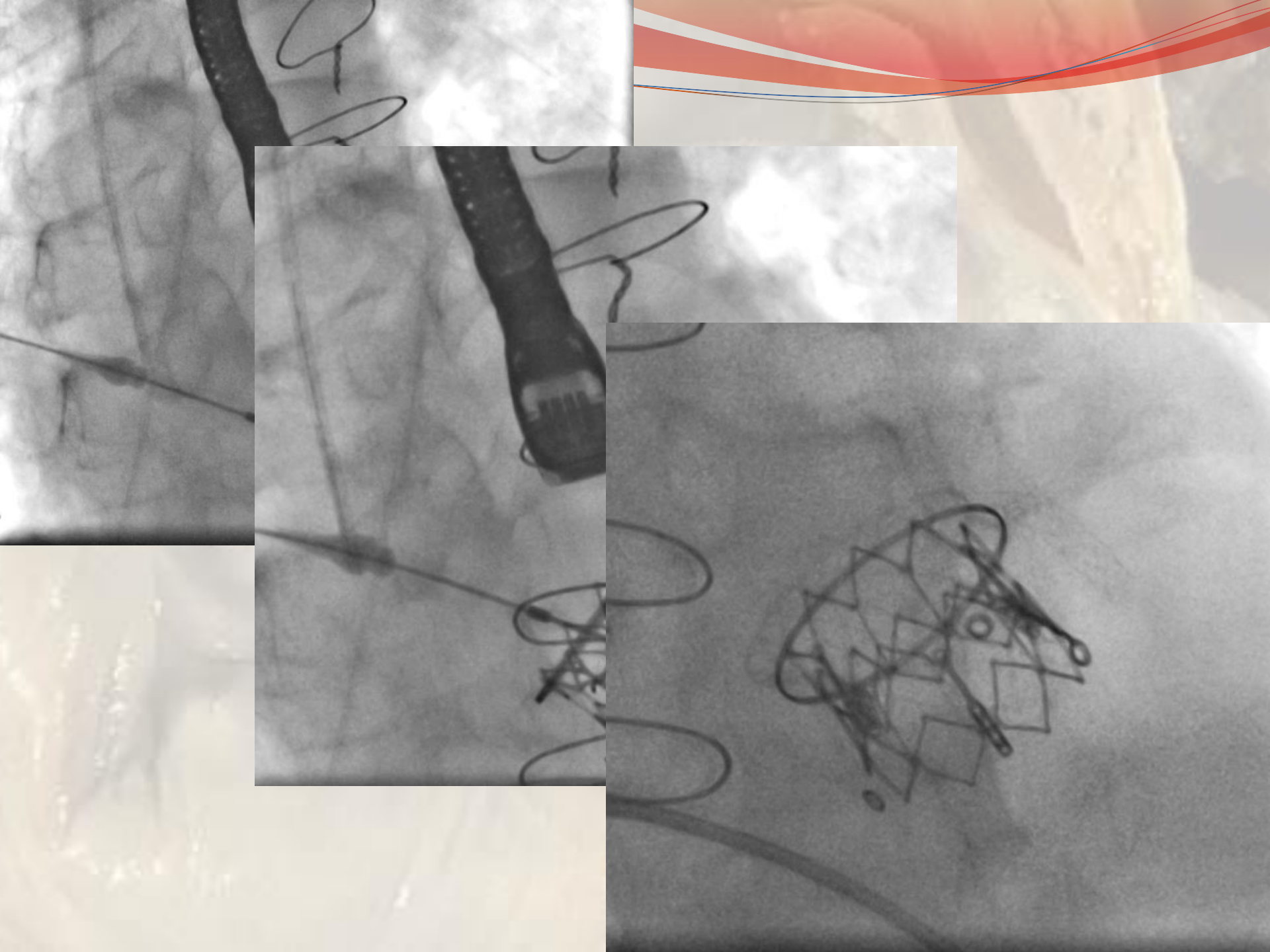
Freedom from reoperation 10ys 82±19%

20ys 55±25%

Circulation. 2001; 104[suppl I]:I-12-I-15

Results

The linearized rate of reoperation in rheumatic patients following mitral valve reconstruction is 2% per patient/year



Paradigma gestionale