



Minimally Invasive Nonresectional Chordal Foldoplasty For Redundant Posterior Mitral Valve Prolapse

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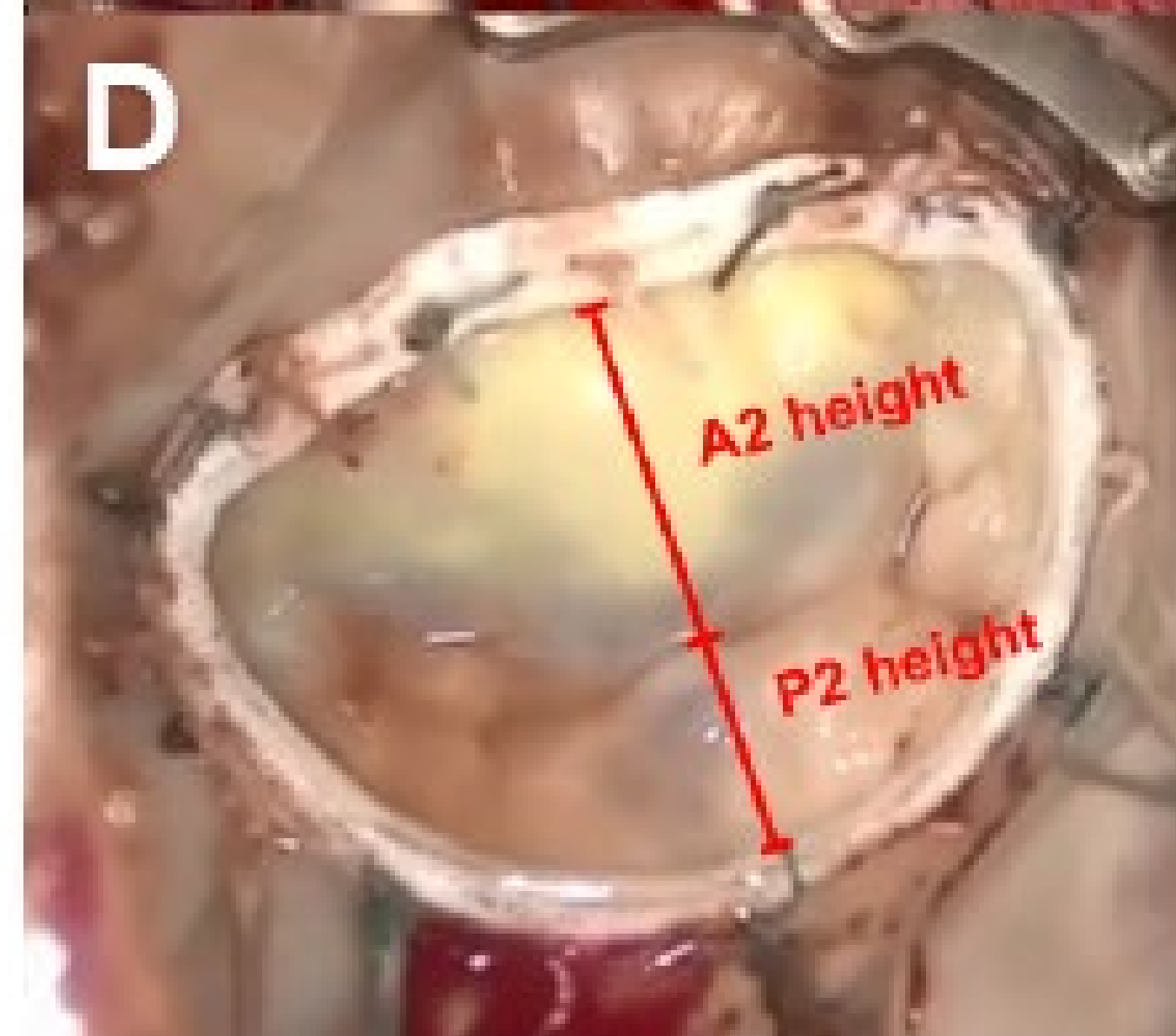
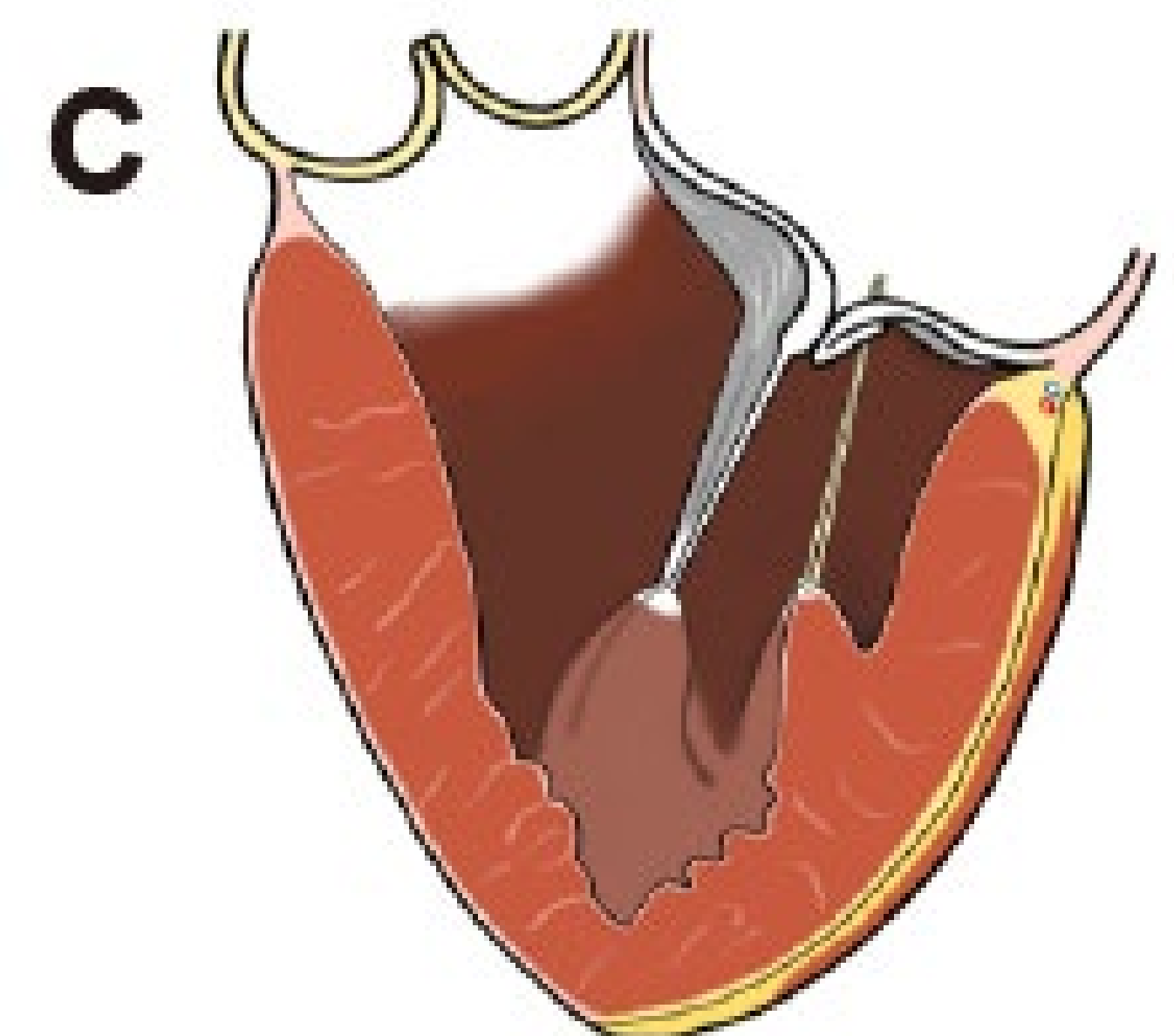
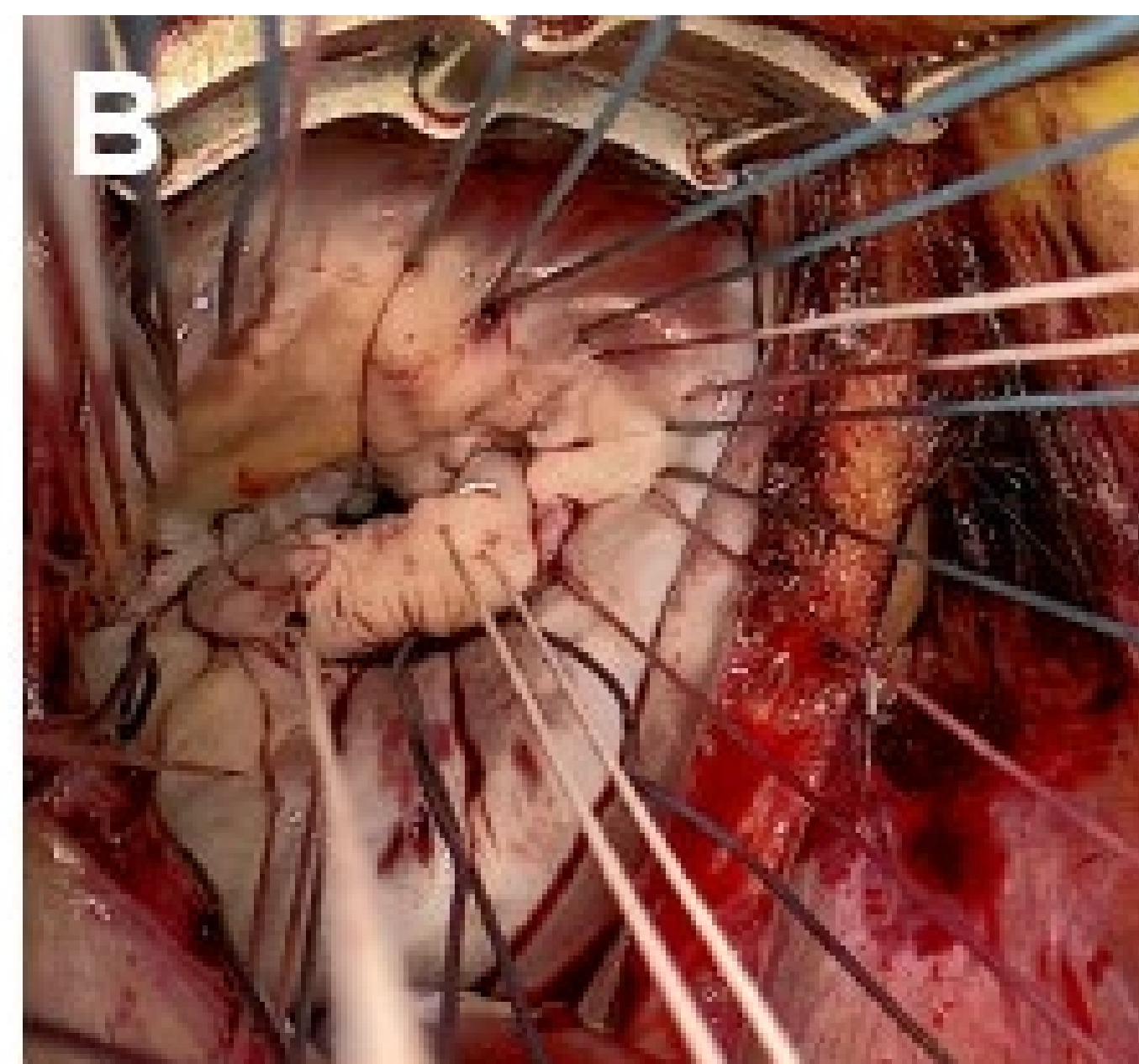
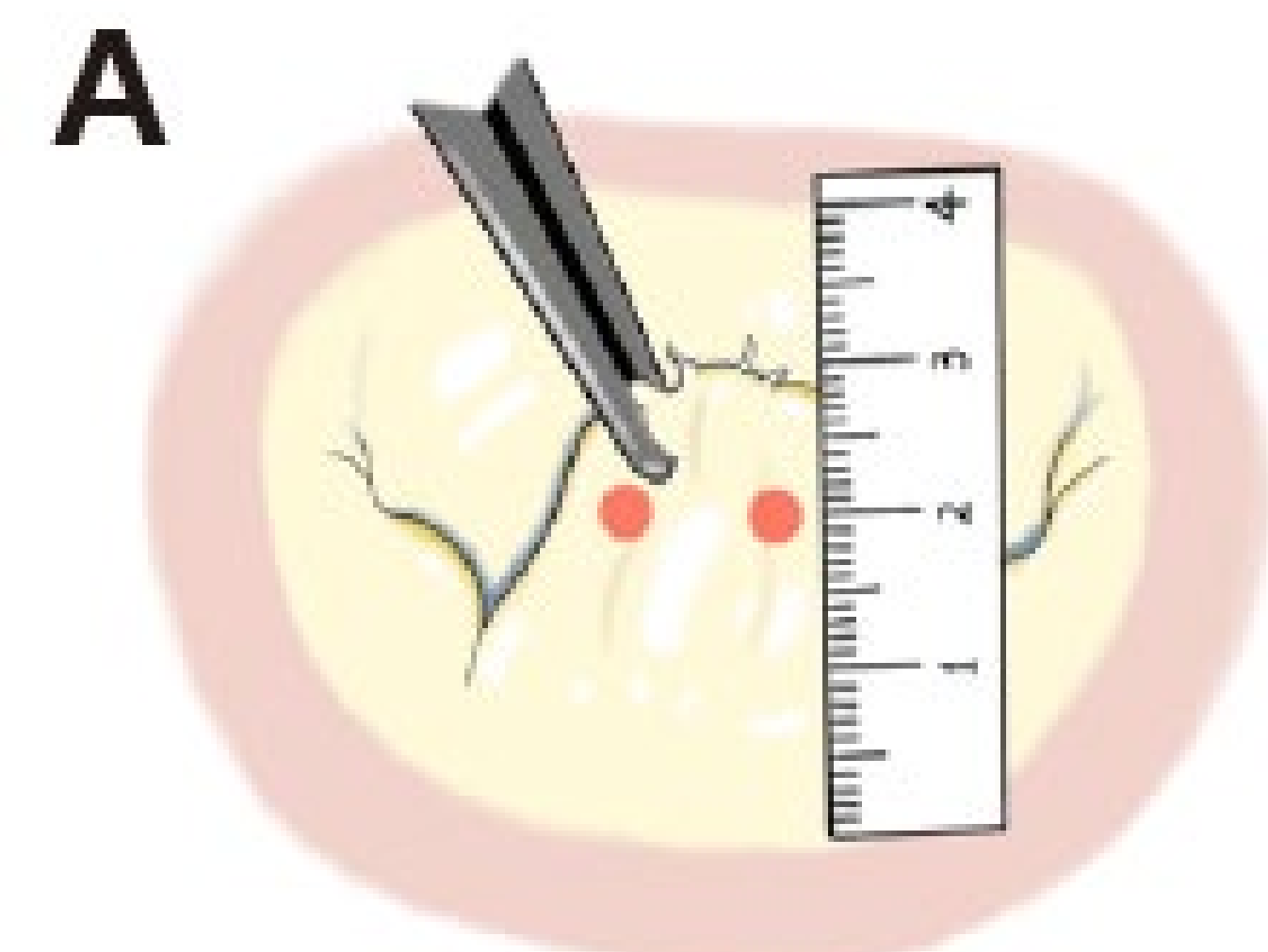
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Redundant posterior mitral prolapse:

➤ *Resection* Technique

- Quadrangular resection with leaflet sliding
- Butterfly resection

➤ *Nonresectional* Chordal Foldoplasty



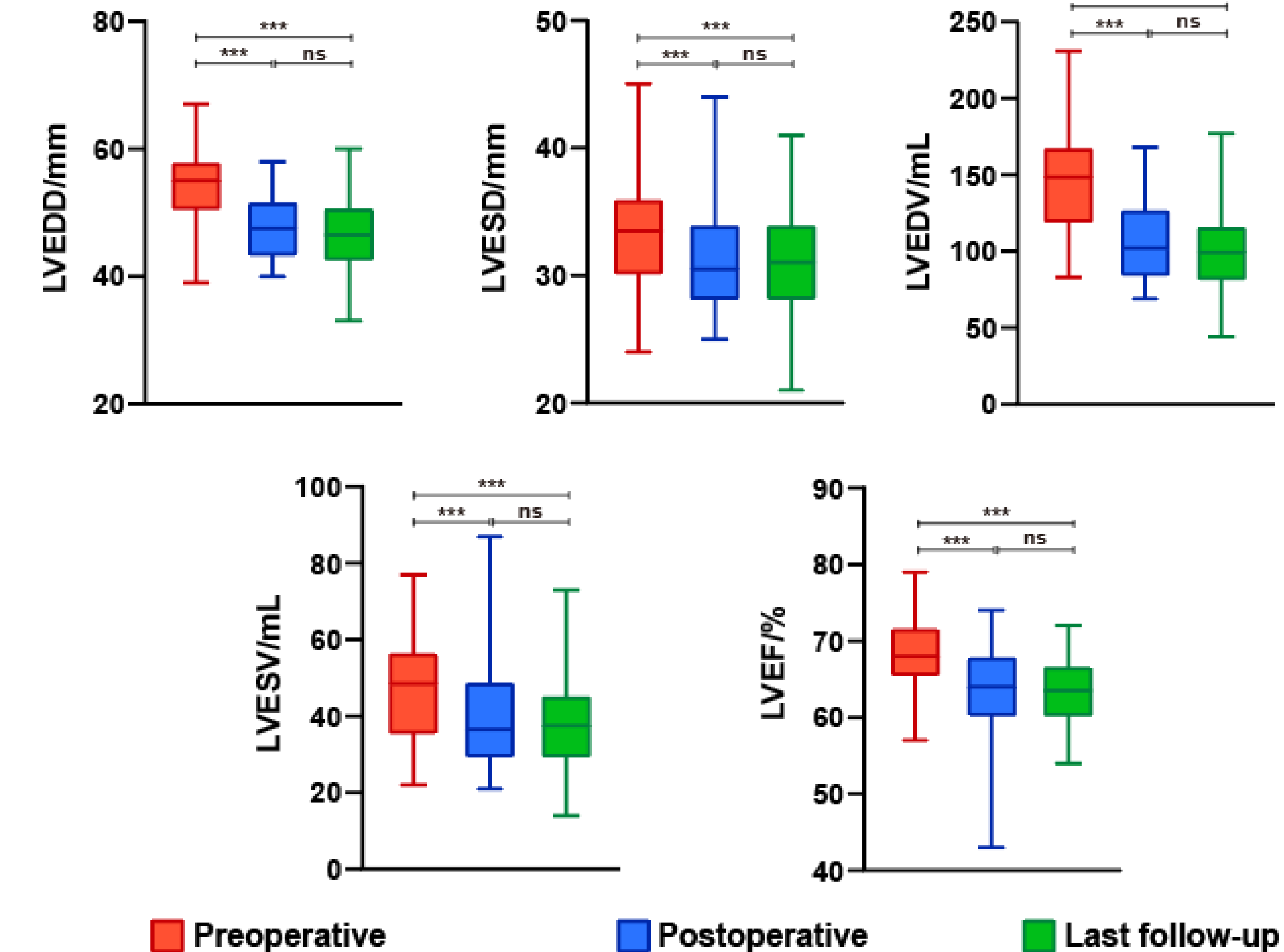
Baseline Information

Variable	Outcomes (N=80)
Clinical characteristics	
Age, y	56.7 ± 11.9
Female sex, n (%)	32 (40.0)
BMI, kg/m ²	23.4 ± 3.7
Creatinine, μmol/L	75.4 ± 15.7
NYHA III/IV, n (%)	62 (77.5)
EuroScore II, %	1.1 (0.7, 1.7)
Pre-existing comorbidities	
History of AF, n (%)	6 (7.5)
History stroke, n (%)	1 (1.3)
Hypertension, n (%)	36 (45.0)
Diabetes, n (%)	2 (2.5)
COPD, n (%)	4 (5.0)
CAD, n (%)	21 (26.3)
Hyperlipidemia, n (%)	18 (22.5)
Echocardiographic data	
Grade of MR, n (%)	
Moderate	2 (2.5)
Moderate-to-severe	28 (35.0)
Severe	50 (62.5)
Posterior leaflet prolapse	70 (87.5)
Anterior leaflet prolapse	6 (7.5)
Bileaflets prolapse	4 (5.0)

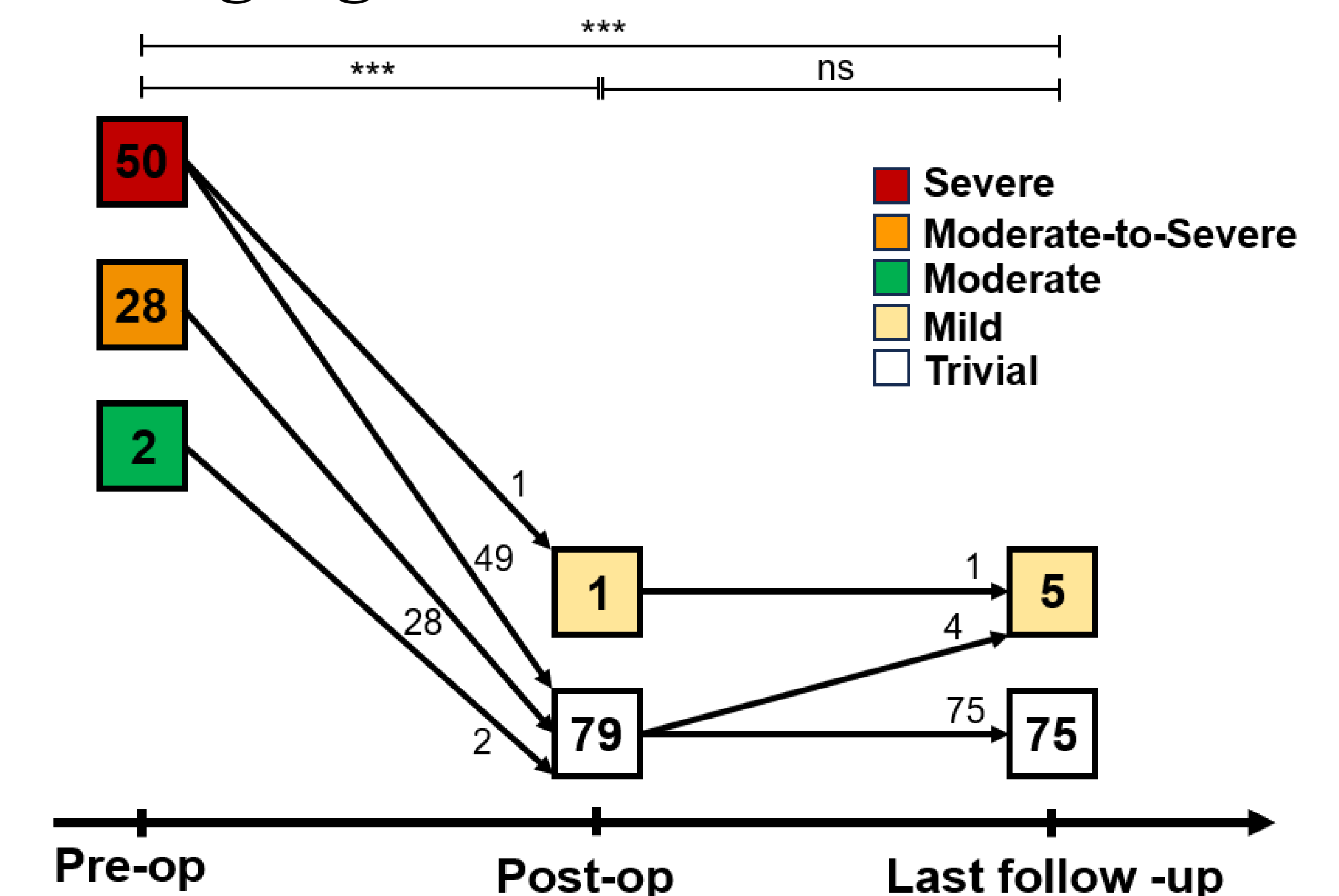
Intraoperative Data

Variable	Outcomes (N=80)
Leaflet pathology, n (%)	
Chordae rupture	58 (72.5)
Chordae elongation	22 (27.5)
Number of PTFE chordae	
Two	74 (92.5)
Three	4 (5.0)
Four	2 (2.5)
Annuloplasty ring size, n (%)	
Size 28	4 (5.0)
Size 30	12 (15.0)
Size 32	32 (40.0)
Size 34	22 (27.5)
Size 36	10 (12.5)
Coaptation height of A2-P2, mm	7.6 ± 0.7
Additional procedure, n (%)	
Maze	4 (5.0)
TVP	15 (18.8)
Commissure suture	13 (16.3)
Operation time, min	199 (178, 229)
CPB time, min	97 (84, 109)
Aortic cross-clamp time, min	65 (55, 74)
Re-clamping for SAM, n (%)	0 (0)

Left Ventricular Size



Mitral Regurgitation Grade



Conclusion: This novel mitral valve repair technique for redundant mitral valve leaflet prolapse was safe, effective, and easy to replicate, and resulted in excellent early outcomes.