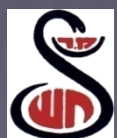


# Mitral Valve Repair in Endocarditis: A Comparison to Repair Results in Non Infected Myxomatous Disease

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# Background

Mitral Valve Repair and Replacement in Endocarditis: A Systematic Review of Literature *(Ann Thorac Surg 2007;83:564 –71)*

**Conclusion:** MV repair is associated with good clinical early and long-term results in surgery for endocarditis.

Mitral Valve Infective Endocarditis: Benefit of Early Operation and Aggressive Use of Repair *(Ann Thorac Surg 2009;87:1728 –34)*

**Conclusion:** Mitral valve repair was associated with a long-term survival advantage compared with valve replacement.

# Objective

## Primary:

1. **Long term echo results** of mitral valve repair for myxomatous disease compared to repair for mitral valve endocarditis
2. Overall long term clinical results

# Methods

- From 2004, 418 patients underwent mitral valve repair, for endocarditis (SBE, group 1, n=37) or myxomatous (group 2, n=381) disease
- All patients in group 1 had acute or sub-acute SBE
- Post operative complications, and follow up of clinical and echocardiography evaluation were compared between the two groups

# Methods

## Patients Data

	<b>SBE</b>	<b>Non SBE</b>	<b>P Value</b>
<b>N</b>	<b>37</b>	<b>381</b>	
Age	48±17	59±13	0.001
Male	27(73%)	293(77%)	0.549
EF (%)	59±8	59±8	0.930
Mean MR	3.5±0.7	3.6±0.8	0.802
Mean FC	1.9±0.9	2±0.8	0.388
FC I (Asymptomatic)	16(42%)	107(28%)	0.177
FC II-IV	21(58%)	274(72%)	
Redo operation	5(14%)	36(9%)	0.390

# Methods

Table 2: Operative Data

	<b>SBE (n=37)</b>	<b>Non SBE (n=381)</b>	<b>P Value</b>
Timing: Elective	11(30%)	331(87%)	0.000
Not Elective	26(70%)	50(13%)	
Con. Procedure:	11(30%)	210(55%)	0.003
TVR/TVre	1(3%)	53(14%)	0.068
Maze	4 (11%)	65(17%)	0.485
CABG	7(19%)	56(15%)	0.474
AVR	0(0%)	20(5%)	0.239
Aorta	0(0%)	5(1%)	1.000
Mini Invasive	0(0%)	55(14%)	0.009

# Methods

Table 3: Operative technique

	<b>SBE (n=37)</b>	<b>Non SBE (n=381)</b>	<b>P Value</b>
Leaflet resection	9(24%)	192(50%)	0.003
Artificial chorda	14(38%)	203(53%)	0.085
Annuloplasty	33(89%)	372(98%)	0.021
Edge-to-Edge	0(0%)	12(3%)	0.612

# Early Results

	<b>SBE (n=37)</b>	<b>Non SBE (n=381)</b>	<b>P Value</b>
Mortality	0(0%)	1(0.3%)	1.000
CVA	0(0%)	3(1%)	1.000
TIA	1(3%)	10(3%)	1.000
Low Cardiac Output	1(3%)	5(1%)	0.429
Renal F/Dialysis	0(0%)	10(3%)	1.000
IABP	1(3%)	1(0.3%)	0.169
Pacemaker	0(0%)	7(2%)	1.000
Length Of Stay	8±3	6±3	0.012



# Late Results

	<b>SBE</b>	<b>Non SBE</b>	<b>P Value</b>
<b>N</b>	<b>37</b>	<b>381</b>	
Clinical FU duration (m)	23±21	25±19	0.503
Echo FU duration (m)	18±21	20±18	0.592
Reoperation on MV	2(5%)	7(2%)	0.185
Late death (all causes)	0(0%)	5(1%)	1.000
Mean FC:	1.3±0.6	1.4±0.7	0.284
FC I	31(84%)	258(68%)	0.386
FC II	3(8%)	90(24%)	
FC III	3(8%)	29(8%)	
FC IV	0(0%)	4(1%)	
EF (%)	58±7	56±8	0.125

# Late Results II

	<b>SBE (n=37)</b>	<b>Non SBE (n=381)</b>	<b>P Value</b>
CVA	0(0%)	8(2%)	1.000
TIA	2 (6%)	34(9%)	1.000
Bleeding events (all)	1(3%)	11(3%)	1.000
CV events	4(10%)	50(13%)	0.782
Arrhythmia (AF, ablation, DCCV)	6(16%)	88(23%)	0.503
MI	0(0%)	1(0.3%)	1.000

# Late Echo Results

	SBE (n=37)	Not-SBE (n=381)	P Value
Mean MR	1.7±0.8	1.7±0.7	0.769
MR grade 0/1	17(47%)	164(43%)	0.516
MR grade 2	15(40%)	183(48%)	
MR grade 3	4(10%)	30(8%)	
MR grade 4	1(3%)	4(1%)	
Freedom from MR 2+	17(47%)	164(43%)	0.705
Freedom from MR 3+	246(87%)	347(91%)	0.322

# Conclusions

Repair of the mitral valve is a reasonable and feasible solution in the setting of mitral valve endocarditis, in light of mid-term clinical and echo follow up

Results are comparable to valve repair in myxomatous disease

