Table 2. Changes in Postoperative Atrial Fibrillation at Different Timepoints (n = 30)

Timepoint	Group A No. (%)	Group B No. (%)	p value
Preoperative	12 (80.0%)	11 (73.3%)	0.666
After 1 month	12 (80.0%)	8 (53.3%)	0.121
After 3 months	11 (73.3%)	5 (33.3%)	0.028
% Change	8.70%	54.50%	-

Table 3. Echocardiographic Parameters Before and After Surgery (n = 30)

Parameter	Timepoint	Group A Mean±SD	Group B Mean±SD	p value
LA diameter (mm)	Pre-op	60.20 ± 3.41	62.07 ± 3.45	0.147
	1 mo	55.60 ± 1.24	49.00 ± 2.73	<0.001
	3 mo	52.33 ± 1.11	43.20 ± 1.52	<0.001
EF (%)	Pre-op	53.80 ± 2.31	52.67 ± 1.59	0.128
	1 mo	54.53 ± 1.39	58.40 ± 1.96	<0.001
	3 mo	55.80 ± 1.52	63.87 ± 2.56	<0.001

Table 4. Operative Details of Mitral Valve Replacement (n = 30)

Parameter	Group A (n=15) Mean ± SD	Group B (n=15) Mean ± SD	p value
Aortic cross-clamp time (min)	28.4 ± 4.9	32.1 ± 5.6	0.084
Cardiopulmonary bypass time (min)	51.7 ± 8.8	57.1 ± 6.9	0.072
Postoperative bleeding (ml)	385.3 ± 39.9	411.3 ± 42.4	0.095

Table 5. Postoperative ICU and Hospital Stay (n = 30)

Parameter	Group A (n=15) Mean ± SD	Group B (n=15) Mean ± SD	p value
ICU stay (days)	5.25 ± 0.46	5.02 ± 0.49	0.195
Hospital stay (days)	8.93 ± 1.22	8.52 ± 1.51	0.420

Table 6. Early Postoperative Complications Following Mitral Valve Replacement (n = 30)

Complication	Group A (n=15) n (%)	Group B (n=15) n (%)	p value
Atrial fibrillation (AF)	11 (73.3%)	5 (33.3%)	0.028
Bleeding	1 (6.7%)	1 (6.7%)	1.000
Superficial wound infection	1 (6.7%)	1 (6.7%)	1.000
Renal complication	1 (6.7%)	0 (0.0%)	0.309
Respiratory complication	0 (0.0%)	1 (6.7%)	0.309
Transient ischemic attack (TIA)	1 (6.7%)	0 (0.0%)	0.309
In-hospital mortality	0 (0.0%)	0 (0.0%)	-

Discussion

In this prospective observational study conducted at Bangabandhu Sheikh Mujib Medical University and Al-Helal Specialized Hospital, patients with mitral valve disease and giant left atrium undergoing mitral valve replacement with or without left atrial size reduction were evaluated. Baseline characteristics were comparable between groups, with rheumatic etiology and a high prevalence of atrial fibrillation predominating; notably, the addition of left atrial