TRIANGULAR PLASTY FOR ATRIOMEGALY’S LEFT ATRIUM FOR DURING MITRAL VALVE REPLACEMENT

Popov Volodymyr V., Pukas Katerina V., Lazorishinetz Vasily V.
National Amosov’s Institute of Cardio-Vascular Surgery, Kyiv, Ukraine

Background

Correction of mitral valve diseases without plastic of atrial left atrium leads to:
Worse hemodynamic conditions
Bronsches`s and left ventricle`s compression at the postoperative and remote period
Atrial fibrillation and the risk of thrombotic events

OBJECTIVE
To determined possibilities of left atrium (LA)’s reduction by triangular plastic of LA (TPLA) (original method) during mitral valve replacement (MVR) for isolated mitral valve disease (MVD).

Material

• The reasons of MVD were: rheumatism (77.0%), lipoidoses (13.4%), atherosclerosis (9.6%).
• 92 (14.9%) operations were performed after previous closed mitral commissurotomy.
• Concomitant correction of tricuspid valve disease was in 29 (9.1%) pts.
• Concomitant correction of atrial fibrillation (Maze-IV) was in 21 (3.1%) pts (only group A).

METHODS

• All operations were performed with cardiopulmonary bypass and moderate hypothermia with crystalloid cardioplegia (Custodiol).
• There werenot marked any specific complications in group A at the hospital period.

Cross-clamping time of sota were:
group A 85.4 ± 6.1 min
group B 53.2 ± 4.9 minutes (p<0.05).

RESULTS

• Hospital mortality in group A - 0.9%.
Reason of death: pneumonia (1 pts).
• Hospital mortality in group B - 2.6%.
Reasons of death: brain damage (thrombembolism) (3 pts), heart failure (9 pts), MOF (5 pts)

Dynamics of LV’ values at group A (n = 108)

<table>
<thead>
<tr>
<th>Value</th>
<th>Before operation</th>
<th>After operation</th>
<th>Remote period</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESVL (ml/m²)</td>
<td>80.2 ± 9.3</td>
<td>70.7 ± 8.3</td>
<td>67.1 ± 5.6</td>
</tr>
<tr>
<td>EF LV</td>
<td>0.54 ± 0.03</td>
<td>0.55 ± 0.02</td>
<td>0.49 ± 0.03</td>
</tr>
<tr>
<td>LA (mm)</td>
<td>72.1 ± 6.3</td>
<td>69.1 ± 6.1</td>
<td>70.1 ± 8.1</td>
</tr>
</tbody>
</table>

Dynamics of LV’ values at group B (n = 572)

<table>
<thead>
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<th>Value</th>
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<th>Remote period</th>
</tr>
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Remote results (group B)
545 (97.6%) pts follow up
excellent + good results
Average follow-up
189 (34.6%) 11.8 ± 1.5 years
sinus rhythm – 0.0%

CONCLUSION

The method of triangular plastic of left atrium allows to improve better clinical results at group A than B (p<0.05).