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

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Background

Correction of mitral valve diseases without plasticity of the left atrium leads to:
- Worse hemodynamic conditions
- Bronchus’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 plasticity 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%), lipoidosis (13,4%), atherosclerosis (9,0%).
- 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 of Correction

Group A - Triangular plasticity of LA (original method) including ligation of LA’s auriculum was performed in 108 (15,9%) pts.

Group B 572 (84,1%) pts only – MVR was occurred without plasticity of LA and ligation of LA’s auriculum (control group).

Methods

- All operations were performed with cardiopulmonary bypass and moderate hypothermia with crystalloid cardioplegia (Custodiol).
- There weren’t marked any specific complications in group A at the hospital period.

Cross-clamping time of aorta were:
- Group A 85,4 ± 6,1min
- Group B 53,2 ± 4,9 minutes (p<0,05).

Results

- Hospital mortality in group A - 0,9%.
  Reason of deaths: pneumonia (1pts.).
- Hospital mortality in group B - 2,6%.
  Reasons of deaths: brain damage (thrombemboli) (3 pts), heart failure (9 pts), MOF (5 pts)

Conclusion

The method of triangular plasticity of left atrium allows to improve better clinical results at group A than B (p<0,05).