

Early Outcome of Tricuspid Valve Repair Using Prosthetic Ring Annuloplasty versus Suture Annuloplasty

The purpose of this study is to compare the early outcome of tricuspid valve repair using prosthetic ring annuloplasty versus suture annuloplasty.

Methods: In the period between March 2016 and September 2017, 40 patients with severe functional tricuspid regurgitation (TR) secondary to rheumatic mitral with or without aortic valve pathology divided into two equal groups underwent open heart surgery at Kasr Al-Aini Hospitals, Cardiothoracic surgery department. Group (1) had tricuspid valve repair using suture annuloplasty, while Group (2) had tricuspid valve repair using prosthetic ring annuloplasty.

All patients were evaluated thoroughly preoperative, intra-operative, and post-operative. Particular attention was paid to clinical and echocardiographic findings of presence of tricuspid regurgitation (TR), its nature and degree, postoperative intensive care unit (ICU) events, ICU stay, hospital stay and follow up of the degree of TR post-operatively. Results: Evaluation showed that there is no significant difference between results of suture annuloplasty and prosthetic ring annuloplasty early postoperative, while late postoperative studies had proven significantly better outcomes with prosthetic ring annuloplasty than with suture annuloplasty techniques concerning low rate of recurrent TR.

Conclusion: we concluded that using prosthetic ring for tricuspid valve repair was better than suture annuloplasty techniques as it was associated with less frequent rates of late postoperative recurrent TR.