

**Early outcome of Tricuspid valve repair using
prosthetic ring annuloplasty versus suture
annuloplasty.**

Thesis

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SUMMARY

Recently, the management of TR has evolved in many ways shoulder to shoulder with the management of mitral incompetence, that is from plication to suture-based annuloplasty to valve replacements and finally to ring-based repairs

In our study, forty patients with severe functional tricuspid regurgitation underwent tricuspid valve repair, using suture annuloplasty in twenty patients and prosthetic ring annuloplasty in the other twenty patients, in association with left sided valvular correction.

Evaluation in these forty patients showed that there is no significant difference between results of suture annuloplasty and prosthetic ring annuloplasty early postoperative, while late postoperative echocardiographic studies had proven significantly better results, at follow up period, with prosthetic ring annuloplasty over the suture annuloplasty techniques in terms of low recurrence rate of tricuspid regurgitation among cases of tricuspid valve repair using prosthetic ring annuloplasty.

Ring-based repairs are advantageous compared with the other suture annuloplasty techniques, since the artificial ring takes tension away from the suture line, prevents recurrent dilatation and so prevents recurrent tricuspid regurgitation.

It is well known that residual TR after surgical repair can lead to biventricular failure, death or reoperation, and therefore, the



choice of repair is controlled predominantly by the recurrence rate of the procedure.

Relative durability and avoiding the greater risk of reoperation to correct persisting or progressing significant tricuspid regurgitation justify the use of prosthetic ring annuloplasty technique.

Color Flow Doppler Echocardiography is a non-invasive, accurate, sensitive and specific method for diagnosing and assessing severity and etiology of tricuspid insufficiency so it is the investigation of choice for preoperative assessment and decision making and postoperative follow up after tricuspid valve repair.