

Six Years Experience in the Modified De Vega's Semicircular Suture Technique for Tricuspid Regurgitation

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Background:

the most common etiology of tricuspid valve (TV) regurgitation is secondary to left heart disease. Valve repair is the primary treatment for TV regurgitation. Several studies have shown the superiority of annuloplasty with a prosthetic ring over other repair techniques. Here we reviewed our experience with modified De Vega's semicircular suture technique for the treatment of acquired TV disease.

Methods:

total of 72 patients underwent a tricuspid valve repair at the Soroka University Hospital between 2006 and 2012. Of these, 42 (58%) patients had modified De Vega's semicircular annuloplasty performed, which was considered functional in nature.

Results:

The severity of the regurgitation prior to the surgery was defined as- mild in 32.5%, moderate in 55% and severe in 12.5% of the patients. The preoperative mean NYHA functional class was 2.4 and the average Eurocore was 15.2%. There were six (14.2%) deaths during the follow-up period of 10 to 125 months (mean- 69). At follow-up- 30 (83.3%) of the survivors were in NYHA Class I or II. All the patients were evaluated echocardiographically. Early study showed TR that was considered mild in 97.5%, moderate in 2.5% and severe in 0% of the cases. Late echocardiographically results showed that 8.5% (8) of the patients shifted from mild to moderate TR. No severe TR was demonstrated during this period of time.

Conclusion:

our strategy is to avoid modified De Vega's repair in cases of severe TR. In patients with severe regurgitation –ring annuloplasty is the preferred technique. Tricuspid valve replacement is hardly ever needed in the treatment of functional tricuspid regurgitation.

In summary - modified De Vega's semicircular suture technique is a simple and effective procedure in patients with mild to moderate regurgitation.