TITLE: Evaluation of paravalvular jets in valve replacement before and after protamin by intra-operative transesophageal echocardiography

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INTRODUCTION:

After valve replacement there is multiple paravalvular jets that decrease after anticoagulation reversal with protamin but their significance must be evaluated.

METHODS:

Forty-eight patients who had mitral or aortic valve replacement surgery underwent intraoperative transesophageal echocardiography to assess the number, length and area of paravalvular jets before and after protamin.

RESULTS:

Fifty-five valves were replaced, 20 aortic and 35 in mitral position; in 7 patients both mitral and aortic valve were replaced .After protamin administration mean length and surface of jets decrease significantly (1.784 before VS 0.587 after protamine for length and 1.123 VS 0.587 after protamin for surface of jet pvalue for both of them 0.000.

DISCUSSION:

As study of Morhead and et al had shown(1)it has been shown during valvular replacement there is a lot of paravalvular leak that close or decrease in length and area. In this study it has been also shown that although length of jet is the main predictor of jet closure among the physical property of jet but there is not strong correlation between length of jet and probability of jet closure .It seems that underlying pathology such as endocarditis and severe calcification are more important.

REFERENCES:

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