

VALUE OF M-MODE AND TWO DIMENSIONAL STUDY IN ASSESSMENT OF RESULTS OF MITRAL VALVE REPAIR

M.Czuma, W.Tracz, A.Dziatkowiak, L.Badacz, R.Pfitzner, J.Kasprzyk

Institute of Cardiology, Cracow

Fourty nine patients with mitral insufficiency pure or prevalance who underwent mitral annuloplasty, valvuloplasty or valvuloplasty and commissurotomy were evaluated by M-mode and two dimensional echocardiography. The follow-up time was from 6 month to 3 years. The following parameters were analysed using M mode methods: the amplitude and diastolic descent rate of anterior mitral leaflet end-diastolic and end-systolic dimension of the left ventricle, ejection fraction, fractional shortening of the left ventricle, mean Vcf. Using two dimensional method area of mitral orifice in diastole and area of incomplete closure of the leaflets in systole were determined.

Preoperatively the mitral valve orifice in patients with pure mitral insufficiency measured from 4 to 8 cm². Incomplete closure of the leaflets was observed early in systole /area from 1,5 to 2,7 cm²/. 41 patients were clinically and hemodynamically improved after surgery. The amplitude, diastolic descent rate of anterior mitral leaflet, end-diastolic and end-systolic dimension of the left ventricle decreased statistically significantly postoperatively. Completeness of systolic closure of the leaflets were observed in 41 patients. In 8 patients leaflets failed to coapt in area from 0,8 to 0,4 cm². The diastolic mitral orifice decreased after surgery. Two dimensional echocardiography is of value in the detection of the recurrence of insufficiency as well as stenosis after mitral annuloplasty.