

## MIBI-SPECT (MS) AND TWO-DIMENSIONAL ECHOCARDIOGRAPHY (2DE) FOLLOWING DOBUTAMINE STIMULATION IN THE ASSESSMENT OF CORONARY ARTERY DISEASE (CAD).

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The potential usefulness of both stress dobutamine MS and 2DE in predicting the extent and location of CAD was evaluated in 35 consecutive patients with documented coronary angiography. 11 of them had myocardial infarction (MI). In all patients, the two tests were simultaneously performed. Echocardiograms were analysed in basal state and after dobutamine infusion at increasing doses up to 40 µg/kg/min. 740 MBq MIBI-Tc-99m was administered at the end of the 2DE test.

2DE positive response was defined as an abnormal wall motion and reduced myocardial thickening occurring in myocardial segment (s) during dobutamine infusion by reference to the basal conditions.

CAD was 86% for MS and 77% for 2DE.

Individual assessment of coronary artery lesions showed following results:

	LAD	Cx	RCA	
MS	Sensitivity	77%	77%	69%
	Specificity	70%	90%	90%
2DE	Sensitivity	69%	44%	46%
	Specificity	90%	100%	100%

In patients with MI, no positive response was observed outside the infarct zone by 2DE in 8/9 of cases without multivessel CAD (specificity: 88%) and no residual ischemia was falsely evidenced by MS in these patients. The area of necrosis was identically located by both techniques. The dobutamine stress testing at increasing doses is a feasible and well tolerated stress in any condition. It seems an alternative to other well-known stress methods in the assessment of CAD, particularly in patients with MI. The correlation between MS and 2DE in detection of ischemia at some threshold should be studied in more complex clinical conditions.