

DOBUTAMINE STRESS ECHOCARDIOGRAM, REASON FOR EXAM: , Chest discomfort, evaluation for coronary artery disease., PROCEDURE IN DETAIL: , The patient was brought to the cardiac center. Cardiac images at rest were obtained in the parasternal long and short axis, apical four and apical two views followed by starting with a dobutamine drip in the usual fashion at 10 mcg/kg per minute for low dose, increased every 2 to 3 minutes by 10 mcg/kg per minute. The patient maximized at 30 mcg/kg per minute. Images were obtained at that level after adding 0.7 mg of atropine to reach maximal heart rate of 145. Maximal images were obtained in the same windows of parasternal long and short axis, apical four and apical two windows., Wall motion assessed at all levels as well as at recovery., The patient got nauseated, had some mild shortness of breath. No angina during the procedure and the maximal amount of dobutamine was 30 mcg/kg per minute., The resting heart rate was 78 with the resting blood pressure 186/98. Heart rate reduced by the vasodilator effects of dobutamine to 130/80. Maximal heart rate achieved was 145, which is 85% of age-predicted heart rate., The EKG at rest showed sinus rhythm with no ST-T wave depression suggestive of ischemia or injury. Incomplete right bundle-branch block was seen. The maximal stress test EKG showed sinus tachycardia. There was subtle upsloping ST depression in III and aVF, which is a normal response to the tachycardia with dobutamine, but no significant depression suggestive of ischemia and no ST elevation seen., No ventricular tachycardia or ventricular ectopy seen during the

test. The heart rate recovered in a normal fashion after using metoprolol 5 mg., The heart images were somewhat suboptimal to evaluate because of obesity and some problems with the short axis windows mainly at peak exercise., The EF at rest appeared to be normal at 55 to 60 with normal wall motion including anterior, anteroseptal, inferior, lateral, and septal walls at low dose. All walls mentioned were augmented in a normal fashion. At maximum dose, all walls were augmented on all views except for the short axis was foreshortened, was uncertain about the anterolateral wall at peak exercise; however, of the other views, the lateral wall was showing normal thickening and normal augmentation. EF improved to about 70%., The wall motion score was unchanged., IMPRESSION: 1. Maximal dobutamine stress echocardiogram test achieving more than 85% of age-predicted heart rate., 2. Negative EKG criteria for ischemia., 3. Normal augmentation at low and maximum stress test with some uncertainty about the anterolateral wall in peak exercise only on the short axis view. This is considered the negative dobutamine stress echocardiogram test, medical management.