

NAME OF PROCEDURE, 1. Left heart catheterization with left ventriculography and selective coronary angiography., 2.

Percutaneous transluminal coronary angioplasty and stent placement of the right coronary artery., HISTORY: , This is a

58-year-old male who presented with atypical chest discomfort. The patient had elevated troponins which were suggestive of a myocardial infarction. The patient is suspected of having significant obstructive coronary artery disease, therefore he is undergoing cardiac

catheterization., PROCEDURE DETAILS: , Informed consent was given prior to the patient was brought to the catheterization laboratory. The patient was brought to the catheterization laboratory in postabsorptive state. The patient was prepped and draped in the usual sterile fashion, 2% Xylocaine solution was used to anesthetize the right femoral region. Using modified Seldinger technique, a 6-French arterial sheath was placed. Then, the patient had already been on heparin. Then, a Judkins left 4 catheter was intubated into the left main coronary artery. Several projections were obtained and the catheter was removed. A 3DRC catheter was intubated into the right coronary artery. Several projections were obtained and the catheter was removed. Then, a 3DRC guiding catheter was intubated into the right coronary artery. Then, a universal wire was advanced across the lesion into the distal right coronary artery. Integrilin was given. Then, a 3.0 x 12 Voyager balloon was inflated at 13 atmospheres for 30 seconds. Then, a projection was obtained. Then, a 3.0 x 15 Vision stent was

placed into the distal right coronary artery. The stent was deployed at 15 atmospheres for 25 seconds. Post stent, the patient was given intracoronary nitroglycerin after one projection. Then, there was an attempt to place the intervention wire across the third posterolateral branch which was partially obstructed and this was not successful. Then, a pilot 150 wire was advanced across the lesion. Then, attempt to place the 2.0 x 8 power saver across the lesion was performed. However, it was felt that there was adequate flow and no further intervention needed to be performed. Then, the stent delivery system was removed. A pigtail catheter was placed into the left ventricle. Hemodynamics followed by left ventriculography was performed. Then, a pullback gradient was performed and the catheter was removed. Then, the right femoral artery was visualized and using angiography and then an Angio-Seal was applied. The patient was transferred back to his room in good condition.,FINDINGS,1. Hemodynamics: The opening aortic pressure was 116/61 with a mean of 64. The opening left ventricular pressure was 112 with end-diastolic pressure of 23. LV pressure on pullback was 106 with end-diastolic pressure of 21. Aortic pressure was 111/67 with a mean of 87. The closing pressure was 110/67.,2. Left ventriculography: The left ventricle was of normal cavity, size, and wall thickness. There is a mild anterolateral hypokinesis and moderate inferior and inferoapical hypokinesis. The overall systolic function appeared to be mildly reduced with ejection fraction between 40% and 45%. The mitral valve had no significant prolapse or

regurgitation. The aortic valve appeared to be trileaflet and moved normally.,3. Coronary angiography: The left main is a normal-caliber vessel. This bifurcates into the left anterior descending and circumflex arteries. The left main is free of any significant obstructive coronary artery disease. The left anterior descending is a large vessel that extends to the apex. It gives off approximately 10 septal perforators and 5 diagonal branches. The first diagonal branch was large. The left anterior descending had mild irregularities, but no high-grade disease. The left circumflex is a nondominant vessel, which gives rise to two obtuse marginal branches. The two obtuse marginal branches are large. There is a relatively small left atrial branch. The left circumflex had a 50% stenosis after the first obtuse marginal branch. The rest of the vessel is moderately irregular, but no high-grade disease. The right coronary artery appears to be a dominant vessel, which gives rise to three right ventricular branches, four posterior lateral branches, two right atrial branches, and two small conus branches. The right coronary artery had moderate disease in its proximal segment with multiple areas of plaquing but no high-grade disease. However, distal between the second and third posterolateral branch, there is a 90% stenosis. The rest of the vessels had mild irregularities, but no high-grade disease. Then percutaneous transluminal coronary angioplasty of the right coronary artery resulted in a 20% residual stenosis. Then, after stent placement there was 0% residual stenosis; however, there was partial occlusion of the third posterolateral branch. Then, a wire was advanced

through this and there was improvement of flow. There is improvement from TIMI grade 2 to TIMI grade 3 flow.,CLINICAL IMPRESSION,1. Successful percutaneous transluminal angioplasty and stent placement of the right coronary artery.,2. Two-vessel coronary artery disease.,3. Elevated left ventricular end-diastolic pressure.,4. Mild anterolateral and moderate inferoapical hypokinesis.,RECOMMENDATIONS,1. Integrilin.,2. Bed rest.,3. Risk factor modification.,4. Thallium scintigraphy in approximately six weeks.