

**INDICATIONS FOR PROCEDURE:**, This is a 61-year-old, white male with onset of chest pain at 04: 30 this morning, with history of on and off chest discomfort over the past several days. CPK is already over 1000. There is ST elevation in leads II and aVF, as well as a Q wave. The chest pain is now gone, mild residual shortness of breath, no orthopnea. Cardiac monitor shows resolution of ST elevation lead

**III.**,**DESCRIPTION OF PROCEDURE:**, Following sterile prep and drape of the right groin, installation of 1% Xylocaine anesthesia, the right common femoral artery was percutaneously entered and 6-French sheath inserted. ACT approximately 165 seconds on heparin. Borderline hypotension 250 mL fluid bolus given and nitroglycerin patch removed. Selective left and right coronary injections performed using Judkins coronary catheters with a 6-French pigtail catheter used to obtain left ventricular pressures and left ventriculography. Left pullback pressure. Sheath injection. Hemostasis obtained with a 6-French Angio-Seal device. He tolerated the procedure well and was transported to the Cardiac Step-Down Unit in stable condition.

**HEMODYNAMIC DATA:**, Left ventricular end diastolic pressure elevated post A-wave at 25 mm of Mercury with no aortic valve systolic gradient on pullback.

**ANGIOGRAPHIC FINDINGS:**,I. Left coronary artery: The left main coronary artery is unremarkable. The left anterior descending has 30 to 40% narrowing with tortuosity in its proximal portion, patent first septal perforator branch. The first diagonal branch is a 2 mm vessel with a 90% ostial stenosis. The second diagonal

branch is unremarkable, as are the tiny distal diagonal branches. The intermediate branch is a small, normal vessel. The ostial non-dominant circumflex has some contrast thinning, but no stenosis, normal obtuse marginal branch, and small AV sulcus circumflex branch.,II. Right coronary artery: The right coronary artery is a large, dominant vessel which gives off large posterior descending and posterolateral left ventricular branches. There are luminal irregularities, less than 25%, within the proximal to mid vessel. Some contrast thinning is present in the distal RCA just before the bifurcation into posterior descending and posterolateral branches. A 25%, smooth narrowing at the origin of the posterior descending branch. Posterolateral branch is unremarkable and quite large, with secondary and tertiary branches.,III. Left ventriculogram: The left ventricle is normal in size. Ejection fraction estimated at 40 to 45%. No mitral regurgitation. Severe hypokinesis to akinesis is present in the posterobasal and posteromedial segments with normal anteroapical wall motion.,DISCUSSION:, Recent inferior myocardial infarction with only minor contrast thinning distal RCA remaining on coronary angiography with resolution of chest pain and ST segment elevation. Left coronary system has one hemodynamically significant stenosis (a 90% ostial stenosis at the first diagonal branch, which is a 2 mm vessel). Left ventricular function is reduced with ejection fraction 40 to 45% with inferior wall motion abnormality.,PLAN:, Medical treatment, including Plavix and nitrates, in addition to beta blocker, aspirin, and aggressive lipid reduction.