

PROCEDURE PERFORMED: 1. Left heart catheterization., 2. Bilateral selective coronary angiography., ANESTHESIA: 1% lidocaine and IV sedation, including fentanyl 25

mcg., INDICATION: The patient is a 65-year-old male with known moderate mitral regurgitation with partial flail of the P2 and P3 gallops who underwent outpatient evaluation for increasingly severe decreased functional capacity and retrosternal chest pain that was aggravated by exertion and decreased with rest. It was accompanied by diaphoresis and shortness of breath. The patient was felt to be a candidate for mitral valve repair versus mitral valve replacement and underwent a stress test as part of his evaluation for chest pain. He underwent adenosine Cardiolute, which revealed 2 mm ST segment depression in leads II, III aVF, and V3, V4, and V5. Stress images revealed left ventricular dilatations suggestive of multivessel disease. He is undergoing evaluation today as a part of preoperative evaluation and because of the positive stress test., PROCEDURE: After risks, benefits, alternatives of the above mentioned procedure were explained to the patient in detail, informed consent was obtained both verbally and writing. The patient was taken to the Cardiac Catheterization Laboratory where the procedure was performed. The right inguinal area was sterilely cleansed with a Betadine solution and the patient was draped in the usual manner. 1% lidocaine solution was used to anesthetize the right inguinal area. Once adequate anesthesia had been obtained, a thin-walled Argon needle was used to cannulate the right femoral artery., The guidewire was then advanced

through the lumen of the needle without resistance and a small nick was made in the skin. The needle was removed and a pressure was held. A #6 French arterial sheath was advanced over the guidewire without resistance. The dilator and guidewire were removed and the sheath was flushed. A Judkins left #4 catheter was advanced to the ascending aorta under direct fluoroscopic visualization with the use of the guidewire. The guidewire was removed and the catheter was connected to the manifold and flushed. The ostium of the left main coronary artery was carefully engaged and limited evaluation was performed after noticing that the patient had a significant left main coronary artery stenosis. The catheter was withdrawn from the ostium of the left main coronary artery and the guidewire was inserted through the tip of the catheter. The catheter was removed over guidewire and a Judkins right #4 catheter was advanced to the ascending aorta under direct fluoroscopic visualization with use of a guidewire. The guidewire was removed and the catheter was connected to the manifold and flushed. The ostium of the right coronary artery was carefully engaged and using hand injections of nonionic contrast material, the right coronary artery was evaluated in both diagonal views. This catheter was removed. The sheath was flushed the final time. The patient was taken to the postcatheterization holding area in stable condition.

**FINDINGS:** LEFT MAIN CORONARY ARTERY: This vessel is seen to be heavily calcified throughout its course. Begins as a moderate caliber vessel. There is a 60% stenosis in the distal portion with extension of the lesion to the

ostium and proximal portions of the left anterior descending and left circumflex coronary artery.,LEFT ANTERIOR DESCENDING CORONARY ARTERY:, This vessel is heavily calcified in its proximal portion. It is of moderate caliber and seen post anteriorly in the intraventricular groove and wraps around the apex. There is a 90% stenosis in the proximal portion and 90% ostial stenosis in the first and second anterolateral branches. There is sequential 80% and 90% stenosis in the mid-portion of the vessel. Otherwise, the LAD is seen to be diffusely diseased.,LEFT CIRCUMFLEX CORONARY ARTERY: ,This vessel is also calcified in its proximal portion. There is a greater than 90% ostial stenosis, which appears to be an extension of the lesion in the left main coronary artery. There is a greater than 70% stenosis in the proximal portion of the first large obtuse marginal branch, otherwise, the circumflex system is seen to be diffusely diseased.,RIGHT CORONARY ARTERY: , This is a large caliber vessel and is the dominant system. There is diffuse luminal irregularities throughout the vessel and a 80% to 90% stenosis at the bifurcation above the posterior descending artery and posterolateral branch.,IMPRESSION:,1. Three-vessel coronary artery disease as described above.,2. Moderate mitral regurgitation per TEE.,3. Status post venous vein stripping of the left lower extremity and varicosities in both lower extremities.,4. Long-standing history of phlebitis.,PLAN: , Consultation will be obtained with Cardiovascular and Thoracic Surgery for CABG and mitral valve repair versus replacement.