

EXAMINATION: , Cardiac catheterization.,PROCEDURE

PERFORMED: , Left heart catheterization, LV

cineangiography, selective coronary angiography, and right heart catheterization with cardiac output by thermodilution

technique with dual transducer.,INDICATION: , Syncope with

severe aortic stenosis.,COMPLICATIONS: ,

None.,DESCRIPTION OF PROCEDURE: , After informed

consent was obtained from the patient, the patient was

brought to the cardiac catheterization laboratory in a post

observed state. The right groin was prepped and draped in

the usual sterile fashion. After adequate conscious sedation

and local anesthesia was obtained, a 6-French sheath was

placed in the right common femoral artery and a 8-French

sheath was placed in the right common femoral vein.

Following this, a 7.5-French Swan-Ganz catheter was

advanced into the right atrium where the right atrial pressure

was 10/7 mmHg. The catheter was then manipulated into the

right ventricle where the right ventricular pressure was

37/10/4 mmHg. The catheter was then manipulated into the

wedge position where the wedge pressure was noted to be 22

mmHg. The pulmonary arterial pressures were noted to be

31/14/21 mmHg. Following this, the catheter was removed,

the sheath was flushed and a 6-French JL4 diagnostic

catheter was the advanced over the guidewire and the left

main coronary artery was cannulated and selective angiogram

was obtained in orthogonal views. Following this, the catheter

was exchanged over the guidewire for 6-French JR4

diagnostic catheter. We were unable to cannulate the right

coronary artery. Therefore, we exchanged for a Williams posterior catheter and we were able to cannulate the right coronary artery and angiographs were performed in orthogonal views. Following this, this catheter was exchanged over a guidewire for a 6-French Langston pigtail catheter and the left ventricle was entered and left ventriculography was performed. Following this, the catheters were removed. Sheath angiograms revealed the sheath to be in the right common femoral artery and the right common femoral arteriotomy was sealed using a 6-French Angio-Seal device. The patient tolerated the procedure well. There were no complications.

**DESCRIPTION OF FINDINGS:** , The left main coronary artery is a large vessel, which bifurcates into the left anterior descending artery and left circumflex artery and has moderate diffuse luminal irregularities with no critical lesions. The left circumflex artery is a short vessel, which gives off one major obtuse marginal artery and has moderate diffuse luminal irregularities with no critical lesions. The left anterior descending artery has moderate diffuse luminal irregularities and gives off two major diagonal branches. There is a 70% ostial lesion in the first diagonal branch and the second diagonal branch has mild-to-moderate luminal irregularities. The right coronary artery is a very large dominant vessel with a 60% to 70% lesion in its descending mid-portion. The remainder of the vessel has moderate diffuse luminal irregularities with no critical lesions. The left ventricle appears to be normal sized. The aortic valve is heavily calcified. The estimated ejection fraction is approximately 60%. There was

4+ mitral regurgitation noted. The mean gradient across the aortic valve was noted to be 33 mmHg yielding an aortic valve area of 0.89 cm<sup>2</sup>.  
**CONCLUSION:** 1. Moderate-to-severe coronary artery disease with a high-grade lesion seen at the ostium of the first diagonal artery as well as a 60% to 70% lesion seen at the mid portion of the right coronary artery. 2. Moderate-to-severe aortic stenosis with an aortic valve area of 0.89 cm<sup>2</sup>. 3. 4+ mitral regurgitation.  
**PLAN:** , The patient will most likely need a transesophageal echocardiogram to better evaluate the valvular architecture and the patient will be referred to Dr Kenneth Fang for possible aortic valve replacement as well as mitral valve repair/replacement and possible surgical revascularization.