PROCEDURE: Left and right heart catheterization with left ventricular, aortic root, right ventricular, and coronary angiograms.

INDICATIONS: Chest pain, pulmonary hypertension, and tricuspid regurgitation.

CONSENT: Informed consent was obtained after the risks, potential benefits, and options were discussed with the patient.

TECHNIQUE: The patient was prepped and draped for the right femoral approach. The skin was infiltrated with 1% Xylocaine. Using the Seldinger technique, we placed a #6 sheath in the right femoral artery and a #8 sheath in the right femoral vein. We manipulated a Swan-Ganz catheter through the venous system to the pulmonary capillary wedge position. A wedge pressure was obtained. Thermodilution cardiac outputs were obtained. Then we shot a root and left ventricular cineangiogram. We did a pullback pressure across the aortic valve, shot a root shot, and then shot the right ventricular cavity. We then shot the coronary arteries with a 4-left and a 4-right femoral Judkins catheter. We reviewed the data and felt that it was adequate. We terminated the procedure by withdrawing the catheter, and the Angio-Seal was used to close the arteriotomy site. Pressure was held over the venous site.

COMPLICATIONS: None.

RESULTS
LEFT VENTRICULAR CINEANGIOGRAM: The ejection fraction is 70% without segmental wall abnormalities. No mitral regurgitation is present.
AORTIC ROOT: There is no aortic insufficiency.
CORONARY ARTERIES
Left Main: Normal, giving rise to the anterior descending and circumflex branches.
Left Anterior Descending: Normal.
Circumflex Coronary Artery: Normal.
Right Coronary Artery: Normal.
RIGHT VENTRICULAR CINEANGIOGRAM: The ejection fraction is diminished, and the tricuspid valve had severe regurgitation into a moderately enlarged right atrium.
HEMODYNAMICS

SIMULTANEOUS LEFT VENTRICULAR AND PULMONARY CAPILLARY WEDGE PRESSURES:
End diastolic gradient = 9.8
Mitral valve area is 1.97
Thermodilution cardiac output, average of three determinations: 6.8

ASSESSMENTS: The patient has significantly elevated pulmonary artery pressures and severe tricuspid regurgitation. She will be considered for the administration of pulmonary vasodilators, i.e. Tracleer. Hopefully this will make an improvement in the significance of her pulmonary artery pressures and tricuspid regurgitation.