PREOPERATIVE DIAGNOSES,1. Acute coronary artery syndrome with ST segment elevation in anterior wall distribution.,2. Documented coronary artery disease with previous angioplasty and stent in the left anterior descending artery and circumflex artery, last procedure in 2005.,3. Primary malignant ventricular arrhythmia and necessitated ventricular fibrillation. He is intubated and ventilated.,POSTOPERATIVE DIAGNOSES:, Acute coronary artery syndrome with ST segment elevation in anterior wall distribution. Primary ventricular arrhythmia. Occluded left anterior descending artery, successfully re-canalized with angioplasty and implantation of the drug-eluting stent. Previously stented circumflex with mild stenosis and previously documented occlusion of the right coronary artery, well collateralized.,PROCEDURES:, Left heart catheterization, selective bilateral coronary angiography and left ventriculography. Revascularization of the left anterior descending with angioplasty and implantation of a drug-eluting stent. Right heart catheterization and Swan-Ganz catheter placement for monitoring.,DESCRIPTION OF PROCEDURE: ,The patient arrived from the emergency room intubated and ventilated. He is hemodynamically stable on heparin and Integrilin bolus and infusion was initiated. The right femoral area was prepped and draped in usual sterile fashion. Lidocaine 2 mL was then filled locally. The right femoral artery was cannulated with an 18-guage needle followed by a 6-French vascular sheath. A guiding catheter XB 3.5 was advanced in manipulated to cannulate the left

coronary artery and angiography was obtained. A confirmed occlusion of the left anterior descending artery with minimal collaterals and also occlusion of the right coronary artery, which is well collateralized. An angioplasty wire with present wire was advanced into the left anterior descending artery, and could cross the area of occlusion within the stent. An angioplasty balloon measuring 2.0 x 15 was advanced and three inflations were obtained. It successfully re-canalized the artery. There is evidence of residual stenosis within the distal aspect of the previous stents. A drug-eluting stent Xience 2.75 x 15 was advanced and positioned within the area of stenosis with its distal marker adjacent to bifurcation with a diagonal branch and was deployed at 12 and 18 atmospheres. The intermittent result was improved. An additional inflation was obtained more proximally. His blood pressure fluctuated and dropped in the 70s, correlating with additional sedation. There is patency of the left anterior descending artery and good antegrade flow. The guiding catheter was replaced with a 5-French Judkins right catheter manipulated to cannulate the right coronary artery and selective angiography was obtained. The catheter was then advanced into the left ventricle and pressure measurement was obtained including pullback across the aortic valve. The right femoral vein was cannulated with an 18-guage needle followed by an 8-French vascular sheath. A 8-French Swan-Ganz catheter was then advanced under fluoroscopic and hemodynamic control and pressure stenting was obtained from the right ventricle, pulmonary artery, and pulmonary capillary wedge position. Cardiac

catheter was determined by thermal dilution. The procedure was then concluded, well tolerated and without complications. The vascular sheath was in secured in place and the patient return to the coronary care unit for further monitoring. Fluoroscopy time was 8.2 minutes. Total amount of contrast was 113 mL.,HEMODYNAMICS:, The patient remained in sinus rhythm with intermittent ventricular bigeminy post revascularization. His initial blood pressure was 96/70 with a mean of 83 and the left ventricular pressure was 17 mmHg. There was no gradient across the aortic valve. Closing pressure was 97/68 with a mean of 82.,Right heart catheterization with right atrial pressure at 13, right ventricle 31/9, pulmonary artery 33/19 with a mean of 25, and capillary wedge pressure of 19. Cardiac output was 5.87 by thermal dilution.,CORONARIES:, On fluoroscopy, there was evidence of previous coronary stent in the left anterior descending artery and circumflex distribution.,A. Left main coronary: The left main coronary artery is of good caliber and has no evidence of obstructive lesions.,B. Left anterior descending artery: The left anterior descending artery was initially occluded within the previously stented proximal-to-mid segment. There is minimal collateral flow.,C. Circumflex: Circumflex is a nondominant circulation. It supplies a first obtuse marginal branch on good caliber. There is an outline of the stent in the midportion, which has mild 30% stenosis. The rest of the vessel has no significant obstructive lesions. It also supplies significant collaterals supplying the occluded right coronary artery.,D. Right coronary artery: The right coronary

artery is a weekly dominant circulation. The vessel is occluded in intermittent portion and has a minimal collateral flow distally.,ANGIOPLASTY: , The left anterior descending artery was the site of re-canalization by angioplasty and implantation of a drug-eluting stent (Xience 15 mm length deployed at 2.9 mm) final result is good with patency of the left anterior descending artery, good antegrade flow and no evidence of dissection. The stent was deployed proximal to the bifurcation with a second diagonal branch, which has remained patent. There is a septal branch overlapped by the stent, which is also patent, although presenting a proximal stenosis. The distal left anterior descending artery trifurcates with two diagonal branches and apical left anterior descending artery. There is good antegrade flow and no evidence of distal embolization.,CONCLUSION: , Acute coronary artery syndrome with ST-segment elevation in anterior wall distribution, complicated with primary ventricular malignant arrhythmia and required defibrillation along intubation and ventilatory support.,Previously documented coronary artery disease with remote angioplasty and stents in the left anterior descending artery and circumflex artery.,Acute coronary artery syndrome with ST-segment elevation in anterior wall distribution related to in-stent thrombosis of the left anterior descending artery, successfully re-canalized with angioplasty and a drug-eluting stent. There is mild-to-moderate disease of the previously stented circumflex and clinic occlusion of the right coronary artery, well collateralized.,Right femoral arterial and venous vascular access.,RECOMMENDATION:, Integrilin

infusion is maintained until tomorrow. He received aspirin and Plavix per nasogastric tube. Titrated doses of beta-blockers and ACE inhibitors are initiated. Additional revascularization therapy will be adjusted according to the clinical evaluation.