PREOPERATIVE DIAGNOSIS AND INDICATIONS:, Acute non-ST-elevation MI.,POSTOPERATIVE DIAGNOSIS AND SUMMARY:, The patient presented with an acute non-ST-elevation MI. Despite medical therapy, she continued to have intermittent angina. Angiography demonstrated the severe LAD as the culprit lesion. This was treated as noted above with angioplasty alone as the stent could not be safely advanced. She has residual lesions of 75% in the proximal right coronary and 60% proximal circumflex, and the other residual LAD lesions as noted above. She will be continued on her medical therapy. At age 90, she is not a good candidate for aortic valve replacement and coronary bypass grafting.,PROCEDURE PERFORMED: , Selective coronary angiography, coronary angioplasty.,PROCEDURE IN DETAIL:, After informed consent was obtained, the patient was taken to the cath lab, placed on the table in the supine position. The area of the right femoral artery was prepped and draped in a sterile fashion. Using the percutaneous technique, a 6-French sheath was placed in the right femoral artery under fluoroscopic guidance. With the guidewire in place, a 5-French JL-4 catheter was used to selectively angiogram the left coronary system. The catheter was removed. The sheath flushed. The 5-French 3DRC catheter was then used to selectively angiogram the right coronary artery. The cath removed, the sheath flushed.,It was decided that intervention was needed in the severe lesions in the LAD, which appeared to be the culprit lesions for the non-ST elevation-MI. The patient was given a bolus of heparin and an ACT of

approximately 50 seconds was obtained, we rebolused and the ACT was slightly lower. We repeated the level and it was slightly higher. We administered 500 more units of heparin and then proceeded with an ACT of approximately 270 seconds prior to the 500 units of heparin IV. Additionally, the patient had been given 300 mg of Plavix orally during the procedure and Integrilin IV bolus and then maintenance drip was started.,A 6-French CLS 3.5 left coronary guide catheter was used to cannulate the left main and HEW guidewire was positioned in the distal LAD and another HEW guidewire in the relatively large third diagonal. An Apex 2.5 x 15 mm balloon was positioned in the distal portion of the mid LAD stenosis and inflated to 6 atmospheres for 15 seconds and then deflated. Angiography was then performed, demonstrated marked improvement in the stenosis and this image was used for sizing the last of the needed stent. The balloon was pulled more proximally and then inflated again at 6 atmospheres for approximately 20 seconds, with the proximal end of the balloon positioned distal to the origin of the third diagonal so as to not compromise the ostium. The balloon was inflated and removed, repeat angiography performed. We attempted to advance a Driver 2.5 x 24 mm bare metal stent, but I could not advance it beyond the proximal LAD, where there was significant calcification. The stent was removed. Attempts to advance the same 2.5 x 15 mm Apex balloon that was previously used were unsuccessful. It was removed, a new Apex 2.5 x 15 mm balloon was then positioned in the proximal LAD and inflated

to 6 atmospheres for 15 seconds and then deflated and advanced slightly with the distal tip of the balloon proximal to the third diagonal ostium and it was inflated to 6 atmospheres for 15 seconds and then deflated and removed. Repeat angiography demonstrated no evidence of dissection. One more attempt was made to advance the Driver 2.5 x 24 mm bare metal stent, but again I could not advance it beyond the calcified plaque in the proximal LAD and this was despite the presence of the buddy wire in the diagonal. I felt that further attempts in this calcified vessel in a 90-year-old with severe aortic stenosis and severe aortic insufficiency would likely result in complications of dissection, so the stent was removed. The guidewires and guide cath were removed. The sheath flushed and sutured into position. The patient moved to ICU in stable condition with no chest discomfort at all.,CONTRAST: , Isovue-370, 120 mL.,FLUORO TIME: , 9.4 minutes.,ESTIMATED BLOOD LOSS: , 30 mL.,HEMODYNAMICS:, Aorta 185/54.,Left ventriculography was not performed. I did not make an attempt to cross this severely stenotic aortic valve.,The left main is a large vessel, giving rise to LAD and circumflex vessels. The left main has no significant disease other than calcification in the walls.,The LAD is a moderate-to-large vessel, giving rise to small diagonals and then a moderate-to-large third diagonal, and then a small fourth diagonal. The LAD has significant calcification proximally. There is a 50% stenosis between the first and second diagonals that we treated with angioplasty alone in an attempt to be able to advance the stent. This

resulted in a 30% residual, mostly eccentric calcified plaque. Following this, there was a 50% stenosis in the LAD just after the takeoff of the third diagonal. This was not ballooned. Beyond this is an 80% stenosis prior to the fourth diagonal and then a 99% stenosis after the fourth diagonal. These 2 lesions were dilated with 10% residual prior to the fourth diagonal and 25% residual distal to the fourth diagonal. As noted above, this area was not stented because I could not safely advance the stent. Note, there was also a 50% stenosis at the origin of the moderate-to-large third diagonal that did not change with angioplasty.,The circumflex is a large, nondominant vessel consisting of a large obtuse marginal with multiple branches. The proximal circumflex has an eccentric 60% stenosis prior to the takeoff of the obtuse marginal. The remainder of the vessel was without significant disease.,The right coronary was a large, dominant vessel giving rise to a large posterior descending artery and small-to-moderate first posterolateral, small second posterolateral, and a small-to-moderate third posterolateral branch. The right coronary has an eccentric smooth 75% stenosis beginning about a centimeter after the origin of the vessel and prior to the acute marginal branch. The remainder of the right coronary and its branches were without significant disease.