

Case Presentation for Percutaneous Transluminal Coronary Angioplasty and Coronary Artery Disease

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ABSTRACT

CASE HISTORY: The patient is a 70-year old who presented in September 2016 to a rural based cardiac and pulmonary rehabilitation program with occasional exertional hypotension and dizziness. He tolerated exercise well completing 550 meters in 6 minutes without symptoms. He consistently walked approximately 1 mile a day and reported occasional lightheadedness/dizziness with walking. He also was able to complete 12 minutes of interval training at 5-6 METs on the Sci-Fit with no symptoms, normal HR, SaO₂, and BP response to exercise. He was not taking any medication. **PHYSICAL EXAM:** Patient came in with initial measurements as follows: weight- 212 lbs, height- 72 in, BMI- 28 kg·m⁻², resting heart rate- 77bpm, resting BP- 120/70mmHg, 95 SaO₂ and a Duke Activity Status Index score of 27.4.

DIFFERENTIAL DIAGNOSES: Exertional hypotension; arthritis; celiac disease. **TESTS & RESULTS:** Patient had CT performed that was negative for injury. In January while on vacation, he reported severe chest tightness and was admitted to the ER. He was referred for angiogram which showed 90 percent blockage of the right coronary artery. A stent was inserted, and he was prescribed Carvediol, Lisinopril, Pravastatin, Plavix, and Nitroglycerin. **FINAL DIAGNOSIS:** Coronary artery disease, percutaneous transluminal coronary angioplasty. **DISCUSSION:** Coronary heart disease is the process of damaged coronary arteries becoming hardened and narrow which causes a decrease in oxygen-rich blood flow to the heart. Coronary heart disease is usually caused by the build-up of plaque in the arteries. Percutaneous transluminal coronary angioplasty is a procedure in which blocked coronary arteries are opened to allow unobstructed blood flow to the heart. After stent placement, he returned to exercise with us. We performed a submaximal walk test with 12-ECG and noted multifocal PVCs (>20 percent of cycles) at HR of 95-100. He tolerated exercise well, and did not report dizziness. The ventricular ectopy persisted at HR above 105, so for the following week he was given an exercise prescription of 1 mile at HR of 100-105. The patient then mentioned he smoked half a cigar in the mornings and the other half in the evenings. **OUTCOME OF THE CASE:** We had a discussion with the patient about his diagnosis and how we will proceed further with his treatment. We also advised him to not smoke a cigar before he came to cardiac rehab in the mornings. The next exercise session we noted only three unifocal PVCs for the entire workout. We have reviewed the importance of cardiovascular exercise as well as resistance exercise for his recovery and improvement. **RETURN TO ACTIVITY AND FURTHER FOLLOW-UP:** Patient was told by physician to wear a cardiac event monitor for 30 days. He is performing 20 minutes of walking at 3.0 mph/2% grade and 15 minutes of steady state training at 4-5 METs on the Sci-fit.