RECURRENT SPONTANEOUS CORONARY ARTERY DISSECTIONS

Sivakumar Srinivasan, MD and Rangadham Nagarakanti, MD

A 41-year-old Caucasian female with a history of hypertension presented with exertional chest pain. Her vital signs were stable on admission and physical examination was unremarkable. An Electrocardiogram (EKG) revealed inferior ST segment elevations consistent with acute myocardial infarction and cardiac enzymes were elevated. She was started on heparin, and underwent immediate cardiac catheterization. Cardiac catheterization revealed an occluded distal right posterior descending artery (RPDA), suggestive of intracoronary thrombus (Figure 1). However close inspection of the RPDA revealed subtle evidence of a dissection. Ventriculography showed preserved left ventricular function and mild hypokinesis of the distal inferior segment. The RPDA was non-intervenable and she was medically managed.

The hypercoagulable work up was negative. The patient remained stable for the next two days and was discharged home. Six days later, she returned to the emergency room with recurrent chest pain and at that time the EKG showed ST segment elevations in both the inferior and lateral leads. She was started on intravenous nitroglycerin and heparin and was taken to the cardiac catheterization lab. Angiography showed spontaneous dissection in the left circumflex artery (Figure 2) and another dissection in the posterior descending branch of right coronary artery (Figure 3). Both the circumflex and RPDA vessels were deemed too small for percutaneous intervention. There was no recent history of trauma, cocaine use, estrogen use or pregnancy. The patient was discharged home with medical management. ■

Figure 1. Dissection in the right posterior descending artery (RPDA).

Figure 2. Spontaneous dissection of the left circumflex coronary.

Figure 3. Spontaneous dissection of the posterior descending branch of right coronary artery.