

C048

A successful case of spontaneous coronary artery dissection treated with catheter intervention for recurrent ischemia during conservative therapy.

A 47-year-old woman with history of breast cancer presented with acute, sudden onset chest oppression. Pre-hospital ECG showed ST elevation in leads II III aVF. But in arrival at our hospital, chest pain disappeared and ECG changes recovered. Since troponin-T level was elevated to 0.195 ng/ml, she was diagnosed as acute coronary syndrome (ACS). Emergent coronary angiogram demonstrated 99% stenosis in #4PD and smoothly 50% stenosis in #2. The LAD and LCX were normal and free of atherosclerotic changes. Intravascular ultra sound (IVUS) revealed coronary artery dissection with intramural hematoma in #2 to #4PD and #4AV. She was diagnosed as spontaneous coronary artery dissection (SCAD). Since, coronary flow was almost TIMI 3, conservative therapy was selected and she was admitted to the coronary care unit. However, after 3 hours, she suffered from chest pain again and ECG showed ST elevation in leads II III aVF with CAVB. She returned to the catheterization lab and angiogram showed severely progression in #4PD (100%) and #4AV (99%). Because of ongoing chest pain and ST elevation with CAVB in ECG, revascularization was required. A 3.0 / 10mm cutting balloon was inflated twice just beyond the proximal #4AV. Then multiple, prolonged inflations with a 2.0 / 20mm balloon were performed throughout the #4AV which restored TIMI-3 flow to the #4AV distal. No coronary stenting was performed. Follow up angiogram on day 3 showed TIMI-3 flow and no propagation of dissection. The patient was discharged home on day 18.

In the absence of randomized data, current consensus favors an initial conservative approach in the management of SCAD. It is clear from published series that those with SCAD who are managed conservatively tend to have better short and long-term clinical outcomes compared with those who undergo revascularization. Urgent intervention is only recommended in cases with compromised flow and in the presence of high risk features such as ongoing or recurrent ischemia, left main dissection, or hemodynamic or electrical instability.

In this case, initial angiogram showed almost TIMI-3 flow without ongoing ischemia, so conservative approach was selected. However, recurrent ischemia required revascularization and successful PCI was achieved with POBA avoiding stent implantation. We reported a successful case of SCAD treated with catheter intervention for recurrent ischemia during conservative therapy.