A case of retrograde dissection during PCI which healed spontaneously despite after revealing transient myocardial ischemia

New Tokyo Hospital, Japan Takayuki Warisawa

A case was 86 years old female with severe stenosis in the proximal LCx. During PCI, retrograde dissection of stent proximal edge was happened after stent deployment. Conservative observation was selected because of preserved TIMI 3 flow, and absence of neither symptom nor ECG change. The next day, however, urgent CAG was performed because of CK elevation, up to 2,000 U/L. But there was no change in the dissected lesion, neither occlusion nor flow delay. Additional myocardial perfusion scintigraphy revealed composition of ischemia and infarction in all the LCx segments. Optimal medical therapy and careful observation were selected, considering her renal function. One month later, follow-up CAG demonstrated healing of the dissection. Furthermore, subsequent myocardial perfusion scintigraphy visualized no ischemia and a little infarction in the LCx segments.

Whether to deploy additional stent after retrograde dissection during PCI or not is controversial. Some predict this complication carries the much risk of acute occlusion and severe ischemia; others argue conservative therapy and careful observation are enough for this complication.

We experienced a case whose retrograde dissection, which caused transient severe ischemia, had healed spontaneously in 1-month, which was assured by myocardial perfusion scintigraphy. Conservative therapy could be one of the options for retrograde dissection, even if it generates transient severe ischemia, when angiography shows TIMI 3 flow without any symptom and ECG change.