

C026

The lead pipe is leaking!

A 83-year-old gentleman, with history of hyperlipidemia, hypertension and diabetes mellitus was admitted for non ST elevation myocardial infarction. There's ST depression over lead V5-6 on his ECG. His baseline creatinine level was 128 umol/L. Coronary angiogram was arranged.

Initial angiogram showed moderate to severe diffuse calcified three vessels disease involving left anterior descending artery (LAD), left circumflex artery (LCx) and right coronary artery (RCA). In view of advanced age and contrast concern, intervention to LCx (culprit lesion) was performed first. While for the other lesions, functional stress test was planned before further intervention. Two overlapping stents were implanted from distal LCx to ostial LCx after vessel size assessed by intravascular ultrasound (IVUS). However, the procedure was complicated with grade 3 coronary perforation in the proximal stent segment after postdilation of the stent. Heparin was reversed with Protamine and Dopamine infusion was started. Prolonged balloon inflation was done in attempt to seal off the perforation. Perforation was reduced after balloon inflation but persisted. So cover stent was used and the perforation was sealed off successfully. Immediate bedside echocardiogram showed that there's 1.6cm pericardial effusion. But drainage window was limited due to uneven distribution of the pericardial effusion. Blood pressure was stabilized with Dopamine infusion and patient was put under close monitoring. Repeated echocardiogram showed static pericardial effusion. Patient was discharged uneventfully few days later.

Coronary perforation was an uncommon but devastating complication of coronary intervention. It is important to avoid and treat promptly in order to improve outcomes.