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**CORONARY ANGIOGRAPHY LEAD TO LEFT MAIN  
CORONARY ARTERY DISSECTION AND OCCLUSION: 1  
CASE DEAD**

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1. Clinical Data: Patients, female, 70 years old, farmers, because of repeated chest tightness companion with obstruction in pars laryngea pharyngis half a months, was admitted to hospital on November 24th 2011. And has hypertension history. Physical examination: T 36.3°C, P: 76 bpm, R 20 bpm, BP 106/72 mm Hg, emaciated somatotypes, heart rate 76 bpm. And the heart rhythm was regular. Auxiliary examination, in ECG, II, III, aVF leads showed QS waves, V2–V6 leads showed ST-T changes. Admitting diagnosis: Coronary Atherosclerosis Heart Disease, Acute inferior Myocardial Infarction; Hypertension (group three, highest-risk). On 1 December 2011, coronary angiography (CAG) was done. Using 6FJL4.0 to do left CAG, at head position, the opening and proximal segment of left main coronary artery (LM) were 60–70% stenosis, small amounts contrast agent refluxed to the aortic sinus, middle and distal segment were roughly normal, diameter was about 4.0 mm, BP was 105/62 mm Hg. Proximal and middle segment of left anterior descending artery (LAD) were calcified and diffuse lesions, showed about 80–95% segmental stenosis, and after issuing the first diagonal branch, LAD was occlusion and saw collateral circulation from septal branches to posterior descending branch. Left circumflex artery (LCX) was small and no stenosis (Fig. 1). At right shoulder position, contrast agent was retention in LM, small amounts contrast agent refluxed to the aortic sinus at systolic period, from the end of LM to LAD had no imagine, contrast agent was retention in LCX, and BP was 70/45 mm Hg (figure 2). At this time, this patient appeared irritable, BP descent, dyspnea, and heart beat weakened after X-Ray. We considered the left main coronary artery dissection and occlusion, a large area of myocardial were ischaemia, and cardiogenic shock. Immediate, we offered closed cardiac massage, balloon-assisted respiration, placement temporary pacemaker, intra-aortic balloon counterpulsation, and other rescue measures, but this patient was died.

**Methods**

2. Discussion: The incidence rate of left main coronary artery dissection is not high when do CAG, but if treatment is not timely can cause death. The patient has opening lesions in LM, and there are two possible reasons to lead to coronary artery dissection (CAD): Firstly, the imaging catheter and the opening of LM are in different axis, secondly, contrast agent is fastly pushed. If once formed left main coronary artery dissection, there are the

**ABSTRACTS**

risk of acute occlusion of LM and tearing left coronary sinus, therefore, it need to quickly handle emergencies. We should grasp the following principles: Firstly, avoid repeated angiography. Repeated angiography can lead to CAD further expansion to distal end of LAD, and lost the opportunity of interventional therapy. Secondly, has the risk of tearing coronary sinus. Once tearing coronary sinus, can lead to two results, right coronary artery occlusion and ascending aortic dissection. So, to keep in mind, once formed left main coronary artery dissection, avoid repeated angiography. But emergency interventional therapy, implant stent to avoid the further expansion of dissection.

**Results** Experiences and lessons: Firstly, grasp the position of CAG, if no contrast agents, according to the head of catheter whether along with the heart beating to preliminary determine the head of the catheter whether into the coronary artery opening. Secondly, develop a good habit to always pay attention to pressure monitoring of the coronary artery opening. If has pressure ridge, contrast agent shouldn't be vigorous and rapid bolus. For the patient, the biggest lesson is that we did not pay great attention, when the opening of LM has lesions.

**Conclusions**

**Heart**

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