

IVUS guided PCI succeeded in reopening LAD after a spontaneous coronary dissection in a resuscitated young female patient

¹Komaki City Hospital

Shuzo Shimazu¹, Taizo Kondo¹, Junya Funabiki¹, Naoaki Kano¹, Yoshihiro Kamimura¹, Akinori Sawamura¹, Kentaro Mukai¹, Hajime Imai¹, Yasuhiro Ogawa¹, Katsuhiko Kawaguchi¹

A thirty-three year-old female having no coronary risk factor incurred sudden cardiac arrest at home, and bystander cardiopulmonary resuscitation was immediately performed by her husband. She was admitted to our hospital by ambulance for treatment of recurrent ventricular fibrillation. After recovery from a lethal arrhythmia, coronary angiography was performed with IABP. Angiography showed a total obstruction of the proximal LAD. Detection of the LAD orifice by IVUS via a guidewire inserted in the LCX revealed a coronary dissection of the proximal LAD. Three stents were deployed in the proximal LAD after successful guidewire insertion to the true lumen of the LAD. During LAD treatment, a reverse dissection from LAD to LMT occurred. Stent placement to proximal LCX and LMT, followed by kissing inflation at both LAD and LCX, was required. Complete revascularization was achieved upon completion of the procedure. Though PCPS was necessary due to severe lung congestion for 3 days, the patient completely recovered without suffering brain damage. Her cardiac wall motion was severely reduced in segment 3 only. The patient was discharged on the 26th hospital day and after undertaking cardiac rehabilitation. [Conclusion] We reported a rare case involving a successful life-saving PCI for a young female patient without any coronary risk factor, nor in puerperal period, suffering a spontaneous coronary dissection leading to sudden cardiac arrest at home. IVUS assisted PCI was imperative for detection of the true lumen and successful guidewire insertion.