THROMBOTIC OCCLUSION OF THE RADIAL ARTERY AS A COMPLICATION OF THE TRANSRADIAL CORONARY INTERVENTION

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Transradial approach is known as a convenient method for percutaneous coronary intervention with lesser bleeding complication and improved patient's comfort. However, thrombotic occlusion of the radial artery can be occurred as a complication of this procedure. Though there are few symptoms according to the radial artery occlusion due to dual blood supplies of the hand, thrombotic occlusion can be a problem especially in the patients with receiving coronary artery bypass graft surgery. To avoid this complication, we should keep in mind adequate anticoagulation, using smaller sheath as possible and meticulous handling during hemostasis.

A 59-year-old man admitted for receiving coronary angiography. The patient was medicated with antihypertensive

drug for five years and felt chest discomfort during modest exercise for five to seven days. After confirmation of his Allen test was normal, the patient was underwent coronary angiography via right radial artery with 6 Fr sheath (Fig. 1A). Because the coronary angiogram revealed significant stenosis of the first diagonal artery, the patient was treated with antianginal medications. The day after the procedure, his radial pulse was disappeared. The ultrasonographic exam demonstrated decreased flow of the radial artery distal to the puncture site and thrombus in it (Fig. 1B and video clip 1). Because there was no symptom related to that and his ulnar artery was normal, he was discharged with antiplatelet agent. After one month, the thrombus was disappeared in the follow up ultrasonogram of the radial artery.

Fig. 1. A 6 Fr sheath is inserted to the right radial artery (A). The ultrasonogram taken one day after the transradial coronary angiography shows decreased flow and thrombus in the lumen (B).

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