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Although arterial closure devices have been developed to save time for treating health-care provider, reduce patient discomfort, and obviate the need for post-catheterization bed rest, some reports reveal an increase risk of infective complication caused by these devices.

In April 2009, a 72-year-old man was referred to our hospital with suspicious of old myocardial infarction. Coronary angiography revealed triple vessel disease, and staged PCI was performed successfully via the right femoral artery using a 7-Fr catheter. Hemostasis was achieved with Perclose AT™ after the second PCI.

About three weeks after the third PCI, he was readmitted because of spike fever, shaking chills, and right groin pain. There was a swelling mass with reddened skin around the puncture site. Laboratory tests showed the elevation of white cell count and C-reactive protein, and blood cultures grew methicillin-sensitive *Staphylococcus aureus*. CT scan revealed pseudoaneurysm of right superficial femoral artery with thrombus. He was diagnosed as infective pseudoaneurysm with sepsis. Debridement, thrombectomy and arterial bypass with Gore-Tex Vascular Graft was performed urgently on 5<sup>th</sup> hospital day followed by five weeks of intravenous cefazolin. He discharged in safely on 65<sup>th</sup> hospital day.

Although groin infection caused by closure devices is an uncommon complication, the clinical course is serious, and urgent surgical management is mandatory. Even though the efficacy of closure devices is reported, we should have a consciousness about the risk of the serious complication on daily practice.