Unusual complication of transradial coronary angiography

Panneerselvam Arunkumar
Consultant Cardiologist, Department of Cardiology, Eugene Clinic, Mettupalayam, India

Case report

A 68-year-old male with diabetes and hypertension underwent a coronary angiogram, through the right radial artery approach, because of inducible ischaemia on stress testing. He had significant triple vessel disease for which revascularisation was advised. Two weeks later he presented with progressively increasing swelling at the radial puncture site. A 2.4 × 1.3 cm pulsatile swelling was seen (fig. 1, movie 1). The skin over the swelling was stretched and shiny. Colour Doppler imaging revealed a pseudo-aneurysm originating from the radial artery through a 3 mm neck (fig. 2, movie 2). There was no evidence of infection or distal thromboembolism. On application of firm manual pressure for 15 minutes followed by a pressure bandage the pseudo-aneurysm was completely obliterated.

Radial artery pseudo-aneurysm is an uncommon complication of transradial intervention. Inadequate application of pressure following the coronary angiogram is the probable cause of this pseudo-aneurysm. Early recognition and treatment is important to prevent infection, thromboembolism to the digits and rupture.

Figure 1
The pulsatile swelling at the radial artery puncture site in the right forearm. The skin is stretched and shiny.

Figure 2
Colour Doppler imaging showing a pseudo-aneurysm arising from radial artery. The prominent styloid process of the radius can also be seen.

Funding / potential competing interests:
No financial support and no other potential conflict of interest relevant to this article was reported.

1 You can find the movies on: http://www.cardiovascmed.ch/for-readers/multimedia

Correspondence:
Panneerselvam Arunkumar, MD DM
6, Agraharam
Mettupalayam 641301
India
dparun1976[at]gmail.com