Rare access site complications following transradial coronary intervention

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Transradial access for coronary procedures dramatically reduces access site complications. A meta-analysis (1) found major access complications in 0.3% of cases that used the radial approach compared with 2.8% of cases that used the femoral approach ($P < 0.0001$).

A 59-year-old man developed a painless, pulsatile mass three weeks after transradial coronary intervention. There was no compromise to the hand and the Allen's test was normal. An ultrasound scan (Figure 1) revealed a radial artery pseudoaneurysm containing some thrombus. Colour Doppler imaging (Figure 2) showed laminar flow entering and exiting the pseudoaneurysm. Prolonged compression failed to obliterate the pseudoaneurysm and the entrance was considered too wide for safe thrombin injection. The pseudoaneurysm was resected surgically and the patient remains asymptomatic.

A 61-year-old man presented with an enlarging, painless pulsatile swelling with a thrill one year after transradial coronary intervention. There was no compromise to the hand and the Allen's test was normal. An ultrasound (Figure 3) with colour Doppler imaging demonstrated an arteriovenous (AV) fistula with turbulent high-velocity flow at the site of communication. The patient was referred for surgical management of the AV fistula. An AV fistula is even less common

than a radial pseudoaneurysm because only small veins are present in the vicinity of the radial artery.

REFERENCE

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Figure 1

Figure 2

Figure 3

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