

LETTER

Knots in the catheterisation laboratory during transradial approach: a reply

We have read with great interest the *Expert opinion* by Gupta *et al* regarding the knots in the cardiac catheterisation laboratory and appreciate their efforts to overcome the complication during transradial coronary angiography.¹ The authors have mentioned that patients above 70 years of age tend to have more tortuous vessels; therefore, femoral approach is preferred, but studies have shown that the rate of major complications is significantly low by transradial approach as compared with transfemoral approach in elderly patients.^{1–4} Although a higher level of expertise is required for the elderly as compared with younger patients, most of the percutaneous coronary diagnostics and interventions can be performed via the radial approach in elderly patients by selecting good equipment and continuous pressure monitoring (to diagnose kinking). Moreover, spasm is the main reason for the catheter knots whether in young or old patients and is due to excessive clockwise rotation of the catheter without continuous pressure

monitoring. Most of the time it is in the radial artery and is relieved with gentle counterclockwise rotation, but if not relieved, then other methods may be followed: (1) advance the 0.035" guidewire and then gently rotate the catheter counterclockwise and (2) fix the distal end of the catheter either by manually compressing it or by sphygmomanometer and then give a gentle counterclockwise rotation.⁵ But in the case described by the author, the knot was in the subclavian artery, and so fixing the distal end is not possible by the above methods, and femoral artery approach is the best alternative approach. Sometimes, rarely the subclavian knots are relieved with deep inspiration and turning the head of the patient on the left side with rotation of the catheter counterclockwise and advancing the guidewire.

In conclusion, transradial approach is technically more demanding, but is the preferred approach in elderly patients.³ Switching to femoral access is always an alternative to bail out patients with any complication.

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