

TRANSRADIAL APPROACH FOR CORONARY ANGIOGRAPHY AND INTERVENTION IN OCTOGENARIANS

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Aims: The transradial approach has potentially lower complication rates when compared to the transfemoral especially in the elderly where vascular complications are more common. However, it may be more challenging due to age related variations in vascular anatomy. We report our experience of the transradial approach in octogenarians undergoing coronary angiography and intervention.

Methods: We retrospectively screened 2455 consecutive patients over a 30 month period (June 2006-December 2008). We identified 108 octogenarians who underwent either coronary angiography (49/108=45%) or PCI (59/108=55%) via either the femoral (18/108=17%) or the radial (90/108=83%) approach. Two thirds (72/108) were male. The mean age was 82.7 years (range 80-93). A significant proportion of these procedures were urgent cases (42/108=39%). Previous CABG had taken place in 11% (12/108). Adjunctive therapies were used as deemed necessary (IABP in 1 radial, temporary pacing wire in 3). Only 2/90 radial procedures (2.2%) had to be aborted and were successfully performed via the femoral route, both due to extreme subclavian artery tortuosity and spasm. The use of the radial access increased dramatically over the study period (9/18=50% in the first 6 months, 36/43=84% in the following 12 months and 45/47=96% in the final 12 month period). No significant access related complications occurred either in the radial or the femoral group. All but one PCIs (chronic total RCA occlusion) were successful. Three (3%) in-hospital deaths occurred, all three in patients that presented with cardiogenic shock and acute myocardial infarction.

Conclusions: Coronary angiography and intervention is safe in octogenarians. The radial access is equally feasible as in the younger age groups, with very low rates of failure in the hands of experienced operators (2.2%). Radial access should be the preferred route in the elderly to avoid complications of prolonged ambulation and femoral vascular access in this vulnerable group of patients.