Transradial approach in complex interventions

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Background: Transradial approach is well established for percutaneous coronary intervention (PCI). The usual opinion is that 7-Fr transradial approach is not suitable for complex PCI, which has been traditionally performed via femoral approach.

Objective: To evaluate the procedural success and outcome of 7-Fr transradial complex PCI.

Method: Single center retrospective study of all patients undergoing 7-Fr transradial complex PCI from January 2012 to March 2013 in a tertiary cardiac center.

Results: Transradial 7-Fr complex PCI was performed in 20 patients after manual and duplex scan assessment of the radial arteries. The size of radial artery on access route was over 2.4 mm in all 20 patients (14 patients underwent duplex scan study). The radial access was obtained successfully in all 20 patients. The age range was 40-78 years with male predominance (18 pts.) There were 10 left main stem PCI (50%), 4 (20%) complex bifurcation lesions, 3 chronic total occlusions (15%), and 3 (15%) acute coronary syndrome patients. All 20 procedures were completed successfully

There was no in-hospital mortality and no periprocedural complications registered. Collor doppler examination showed preserved patency of the punctuated radial artery after 3 months follow up in 18 patients.

Conclusion: A 7-Fr transradial complex PCI is feasible and can be performed successfully without major complications. In suitable patients transradial complex PCI represents good alternative to transfemoral approach in complex PCI procedures.

KEYWORDS: coronary artery disease, percutaneous coronary intervention, radial access.

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