EDITORIAL

Should we use the transradial approach in cardiogenic shock?

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A large body of evidence supports embracing the transradial approach (TRA) in patients with acute coronary syndrome mainly to decrease major bleeding and complications related to vascular access.1-3 This is well reflected in current guidelines from the American Heart Association4 and the European Society of Cardiology / European Association for Cardio-Thoracic Surgery.4 More specifically, several large randomized trials have been published over the last decade demonstrating advantages of the TRA over the transfemoral approach (TFA) in patients with ST-segment elevation myocardial infarction (STEMI).5-7 In an updated meta-analysis of randomized trials,8 the TRA was associated with lower all-cause mortality (risk ratio [RR], 0.71; 95% CI, 0.57–0.88), major bleeding (RR, 0.59; 95% CI, 0.45–0.77), and vascular complications (RR, 0.42; 95% CI, 0.32–0.56) compared with the TFA for primary percutaneous coronary intervention (PCI). However, patients in cardiogenic shock (CS) were largely excluded from these randomized trials, including in the STEMI-RADIAL (ST-Elevation Myocardial Infarction Treated by Radial or Femoral Approach) trial.8

Due to lack of data on TRA in CS, Tokarek et al9 performed an observational analysis of TRA as compared with TFA in patients with CS and STEMI. A total of 945 propensity-score matched pairs of patients with STEMI and CS treated with primary PCI were evaluated using data from the Polish National PCI Registry (ORPKI). Transradial approach was associated with a lower periprocedural mortality (89 [9.4%] vs 176 [18.6%]; P = 0.001) and a lower incidence of cardiac arrest (92 [9.7%] vs 152 [16.1%]; P = 0.001). Transfemoral approach was the strongest independent predictor of periprocedural mortality in a multivariable analysis (odds ratio [OR], 2.087; 95% CI, 1.629–2.674; P = 0.001). Surprisingly, there was no difference in bleeding complications between TRA and TFA.

In conclusion, these data support safety and feasibility of TRA in patients in CS, who often do not have a palpable radial artery. Given the wealth of data, a radial-first approach should be considered in CS.

ARTICLE INFORMATION

DISCLAIMER The opinions expressed by the author(s) are not necessarily those of the journal editors, Polish Society of Internal Medicine, or publisher.

CONFLICT OF INTEREST None declared.

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