RELATIONSHIP BETWEEN TRANSRADIAL PCI EXPERIENCE AND PROCEDURAL METRICS

Oral Contributions
West, Room 2001
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Background: Low use of radial access for percutaneous coronary intervention (PCI) in the U.S. has been partly attributed to concern about the technique’s learning curve. Data regarding associations between transradial intervention (TRI) experience and procedural metrics are sparse.

Methods: We used CathPCI Registry® data from 07/2009-03/2012 to identify new radial operators, defined as those with exclusively femoral PCIs for 6 months before their first TRI in the database. Patient and procedural characteristics and outcomes were described for these operators according to categories of initial radial experience. Primary endpoints included procedural success and contrast volume as surrogate measures of TRI proficiency.

Results: Of 36,233 TRI procedures, 2,278 operators performed up to 10 cases; of these, 718 operators performed up to 50 cases; of these, 191 operators performed up to 100 cases; and of these, 57 operators performed >100 cases. As radial caseload increased, more TRIs were performed in women, in STEMI patients, and for emergency indications (p<0.001 for all 3). PCI success was high for all groups: from 94% for cases 1-10 to 100% for cases >100. Procedural contrast volume remained constant, but with fewer outliers across the spectrum of radial experience (Figure).

Conclusions: As TRI operator experience increases, higher risk patients are chosen for TRI. Despite higher risk profiles, rates of procedural success and contrast use remained unchanged.