

# Transradial versus transfemoral access for female patients who underwent primary PCI in STEMI: Two years follow-up data from acute STEMI interventional registry

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**Background:** Female patients possess a higher risk for poorer outcome in ST segment elevation myocardial infarction (STEMI). There is possibility that transradial access (TRA) for primary percutaneous coronary intervention (PPCI) could provide better outcome than transfemoral access (TFA) in female patients with STEMI.

**Methods:** During access transition period from 2008 to 2010, 418 female patients (out of 1808 patients) underwent PPCI for acute STEMI. The registry recruited all-comers patients with acute STEMI. Major bleeding and vascular access site complications, death rates, and overall MACE rates (composite of death, stroke, re MI and TVR) after 2 years follow-up were compared between TRA and TFA.

**Results:** TRA for PPCI was performed in 261 patients and 157 underwent TFA PPCI. The 30-days and 1 year mortality rates were lower in TRA compared to TFA (6.9 vs. 14.6%,  $p = 0.009$ , and 8.8 vs. 15.3%,  $p.0.032$ , respectively). After 2 years follow-up, the overall MACE rates were similar (26.4% vs. 31.2%,  $p.0.17$ ). The major bleeding and particularly major vascular access site complications were more favorable for TRA than TFA (4.4 vs. 14%,  $p < 0.001$ , and 2.7 vs. 10.8 %,  $p.0.001$ , respectively).

**Conclusion:** Transradial access for primary PCI in female patients provides less bleeding and lower incidence of vascular access site complications, and better early clinical outcome in acute STEMI.

**Key words:** transradial approach; female gender; STEMI