Although the first percutaneous transradial approach (TRA) for diagnostic coronary angiography was described in 1989 and first interventional use in 1993, its practice has been largely disregarded by operators traditionally trained in the femoral approach (FA). The TRA increases patient comfort and reduces vascular complications and major bleeding\(^1\).\(^2\).

At the ACC.11 & i2 Summit 2011 Bertrand et al. presented a meta-analysis of 73 studies (14 randomized, 59 observational) involving a total of 1,022,123 patients. There was a strong association between TRA and mortality early after intervention (OR 0.52, 95% credible interval [CrI] 0.43-0.62), although the beneficial effect compared to FA was mainly due to the observational studies. An association between TRA and death or MI was observed over short-term follow-up (OR 0.66, 95% CrI 0.51-0.82), with an OR of 0.72 (95% CrI 0.41-1.14) for long-term follow-up. Compared with FA, TRA was associated with a major reduction in bleeding (OR 0.22, 95% CrI 0.16-0.29) and in transfusions (OR 0.20, 95% CrI 0.10-0.31)\(^3\).

A learning curve exists for the radial approach that will affect procedure time and radiation dose, with a trend toward lower procedural success rates for radial versus femoral access. Dispite the fact that TRA requires a longer learning curve than FA, the transradial challenges are usually overcome with experience. Nowadays, in view of its benefits, there is no longer any justification for ignoring the transradial approach\(^4\). Multiple randomized clinical trials and reports consistently demonstrate benefits to the patient and improved outcomes from TRA\(^5\). TRA is particularly appealing in patients with coagulopathy, elevated international normalized ratio due to warfarin, or morbid obesity\(^6\).

Radial artery occlusion (RAO) is an infrequent (3% to 10%) and clinically silent complication of TR catheterisation (in properly selected cases) while other complications are less common\(^7\)-\(^10\). Unfortunately RAO occurrence precludes any future TRA. There is evidence that up to half of RAO are re-canalised at 30-day follow up. Heparin has been shown to significantly reduce the incidence of RAO and a clear relationship exists between the heparin dose and the rate of RAO.

Institutions that perform more than 400 elective PCIs per year and more than 36 primary PCI procedures for STEMI per year are considered to be a high-volume centers. Older observational evidence supported a volume-outcome relationship in PCI at both the institutional and operator level. However, more recent data on primary PCI suggest that operator experience may modify the volume-outcome relationship at the institutional level\(^11\).

TRA-PCI can be performed by low-to-intermediate volume operators with standard equipment with a low failure rate. Age over 75 years, prior coronary artery bypass graft surgery, and short stature are independent predictors of TR-PCI failure\(^12\). Appropriate patient selection and careful risk assessment are needed to maximize benefits offered by TR-PCI. Specific technical challenges related to TRA are most often overcome with experience. Understanding the problem will prevent complications and allow successful management.

Bertrand and his group analyzed responses from 1,107 interventional cardiologists in 75 countries. Overall, approximately 50% responded that their TRA practice will increase in the future (68.4% in the United States)\(^3\).

**KEYWORDS:** transradial approach, coronary angiography, percutaneous coronary intervention; learning curve.

**Literature**


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Prošireni sažetak / Extended abstract

The transition from the transfemoral to transradial approach in the high-volume percutaneous coronary intervention center

Hrvoje Pintarić*

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Although the first percutaneous transradial approach (TRA) for diagnostic coronary angiography was described in 1989 and first interventional use in 1993, its practice has been largely disregarded by operators traditionally trained in the femoral approach (FA). The TRA increases patient comfort and reduces vascular complications and major bleeding\(^1\).\(^2\).

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**Literature**


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Prošireni sažetak / Extended abstract

**Bifurcation stenosis on diagnostic coronary angiography after resuscitation of patients with ischemic cardiomyopathy — a case report**

Deiti Prvulović*, Irzal Hadžibegović, Božo Vujeva, Krešimir Gabaldo

General Hospital “Dr J. Benčević”, Slavonski Brod, Croatia

**Case report:** 55 year old male, 2 years earlier anteroseptal STEMI, stenting of pLAD, ischemic cardiopathy with EF 40%. Cardiac arrest with ventricular fibrillation, without ACS, the true bifurcation stenosis of strong CxA-OM1, Medina 1,1,1.

**Questions for discussion:** type of revascularization (PCI vs. CABG), implantation of ICD or not, the order and the timing of these procedures. Authors show how the patient was treated in our institution with reference to current guidelines.

**KEYWORDS:** coronary artery disease, percutaneous coronary intervention, revascularisation.