

INTERVENTIONAL CARDIOLOGY

Radial access improves PCI outcomes

A meta-analysis by researchers from Canada indicates that radial artery access is preferable to the femoral approach for patients with ST-segment elevation myocardial infarction undergoing percutaneous coronary intervention (PCI).

Although previous analyses comparing the two approaches have been conducted, this study is the first to pool randomized data without the inclusion of observational studies. “The radial approach permits early ambulation, shortens the hospital stay, and reduces the bleeding risk,” write the authors. However, the technique is not widely used, “mainly because of lack of demonstrated benefit in terms of hard end points.”

The investigators searched various databases for papers published up to June 2011 and perused abstracts from international cardiology meetings. Ten papers (3,347 patients) were included in the meta-analysis.

In-hospital and 30-day mortality, as well as the incidence of vascular complications,

were significantly reduced with the radial compared with the femoral approach. A nonsignificant trend toward a reduction in major bleeding with radial access was also reported. Procedure time did not differ significantly between the two approaches. When the investigators excluded data from the largest study (RIVAL), the mortality benefit for the radial approach was no longer present.

“It is tempting to recommend that it [radial access] should be the preferred route. However, the significant learning curve ... is well documented,” say the authors. They conclude by recommending that primary PCI should be performed via the radial artery “in experienced hands.”

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Original article Joyal, D. *et al.* Meta-analysis of ten trials on the effectiveness of the radial versus the femoral approach in primary percutaneous coronary intervention. *Am. J. Cardiol.* doi:10.1016/j.amjcard.2011.11.007