

Efficacy of the Radial Approach for the Performance of Primary PCI for STEMI. Still on Time

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Background: Use of the radial approach during primary PCI for STEMI could improve outcome by decreasing the rate of bleeding complications. Wider application of this technique is limited by concerns about longer reperfusion times.

Aim: To investigate the influence of the radial approach on measures of performance of primary PCI

Methods: Retrospective study of 291 consecutive STEMI patients (2004-2006) treated with transradial (67 pts) or transfemoral (224pts) primary PCI. Performance was evaluated as pain to balloon, door to balloon and fluoroscopy times, as well as the angiographic success rate .

Results. Radial pts were younger (57 ± 13 vs. 62 ± 13 y. ; $p<0.01$) but did not differ in terms of other clinical variables, number of diseased vessels, left ventricular function or the prevalence of cardiogenic shock. Radial patients had less complex lesions (78% vs. 88% $p=0.02$) and less use an IABP (5% vs. 17% , $p=0.03$) and. The pain to balloon time (285 ± 255 vs. 247 ± 222 min, $p=ns$), door to balloon time (76 ± 40 vs 75 ± 41 min, $p=ns$), fluoroscopy time (13 ± 11 vs. 11 ± 7 min, $P=ns$) and volume of contrast (149 ± 67 cc vs. 146 ± 70 cc, $p=ns$) were similar in both groups. (Radial approach pts had less access site bleeding complication (33% vs. 4% , $p<0.01$) including large hematoma (8.5 vs 1.5% , $p<0.01$). The angiographic success rate was similar (100% vs. 98% , $p=ns$). At one year a trend for lower mortality was observed in the group of radial pts (6% vs. 14% , $p=0.07$)

Conclusions: Once experience with the transradial approach is gained it can be routinely performed with no increase in treatment or fluoroscopy times. . The transradial approach is as effective as and substantially safer than the femoral approach for reperfusion in STEMI