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i2 SUMMIT

TRANSRADIAL PERCUTANEOUS INTERVENTION IN ACUTE ST ELEVATION MYOCARDIAL INFARCTION USING A SINGLE HEARTRAIL IKARI LEFT GUIDER

i2 Poster Contributions
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Introduction: Primary transradial percutaneous coronary intervention (PTRI) has been shown in randomized controlled trials to be efficacious in patients with acute coronary syndrome. We report our experience using a single Heartrail Ikari Left (IL) guider for PTRI in acute ST segment elevation myocardial infarction (STEMI).

Methods: This is a single centre case series of 213 patients who underwent PTRI by a single radial interventionist between May 2007 and December 2008. In 171 patients, a 6F Heartrail IL guider was used first for diagnostic angiography of the contra-lateral artery followed by cannulation of the infarct related artery (IRA) for PTRI (IL group). In 4 patients (1.9%) the radial artery could not be cannulated. The remaining 38 patients (Non-IL group) had a diagnostic angiography done with a multipurpose catheter followed by a selective guider. The examined outcome included the rate of success of primary PTRI, door to balloon time, procedure duration and volume of contrast used between the 2 groups. Major adverse cardiac events were examined at in-hospital, 30 days and 6 months.

Results: The mean patient age was 56.7 +/- 11.5 years. 88.7% were male. 194 (92.8 %) patients were in Killip class I and II. 11(5.3%) patients in the IL group and 4 in the non-IL group were in Killip class III or IV. 3 required conversion to femoral approach as IL guider could not provide enough support for PTRI. The infarct related arteries (IRA) in the IL group were LAD in 48.2% and RCA in 47.6%. The success rate for PTRI in the IL and non-IL group was 98.2% and 100% respectively. 4 of the 11 (36.4%) high risk patients in the IL group versus 2 of 3 (66.6%) patients in the non-IL group required intra-aortic balloon support. The median door to balloon times for IL vs Non-IL was 89.5 +/- 44.3 vs 111.0 +/- 44.4 mins ($p<0.01$). The mean procedure duration was 38.8 +/- 16.2 vs 42.5 +/- 17.0 mins ($p=0.113$) and the mean volume of contrast use was 141.1 vs 155.6 ml, ($p=0.232$) respectively. The inpatient, 30 days and 6 months MACE were 5.3%, 3% and 3% respectively.

Conclusion: Primary transradial coronary intervention with 6F Heartrail Ikari Left guider is therefore a feasible and effective approach for acute STEMI even in high-risk patients.