IS RADIAL APPROACH BETTER THAN FEMORAL ONE DURING PRIMARY CORONARY ANGIOPLASTY?
INSIGHTS FROM PAPRICA-OUTCOMES DATABASE PARMA PRIMARY CORONARY ANGIOPLASTY

i2 Poster Contributions
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Background: Trans-Radial approach (TRA) during primary coronary angioplasty (pPCI) has been associated with similar rates of procedural success, with lower incidence of bleeding complications when compared with the Trans-Femoral one (TFA), and this benefit may have an effect on MACE and mortality.

Methods: Data from all consecutive pts with STEMI, undergoing pPCI were collected, in order to compare TRA versus TFA in the incidence of MACE, mortality and bleeding complications. Preliminary data are available up to date about 162 pts with 98% of complete short term follow up.

Results: A total of 80 pts out of 162 (49.4%) underwent right TRA pPCI, while 76 pts underwent right TFA (46.9%). Switch from TRA to TFA was required in 6 pts (6.2%). TFA-pts exhibited a worse risk profile with higher frequency of peripheral vascular disease (13% vs 8%, p 0.14), cerebrovascular disease (3.7% vs 1.2%, p 0.15), prior MI (5.5% vs 2.5%, p 0.16), prior bleeding (3.7% vs 1.2%, p 0.15), shock at presentation (5.5% vs 0%, p 0.002), multivessel disease (11.7% vs 7.4%, p 0.18) and left main disease (3.7% vs 0.62%, p 0.05). Mean radiosity time was significantly lower with TFA (12.3±7.6 min vs 14.5±7.1, p 0.05), as well as quantity of contrast mean (196.9±68.3 cc vs 221.8±87.6, p 0.04).

Cumulative incidence of MACE at 30 days in overall population was 8.6%, with all-cause mortality of 6.8%, 1.8% of non fatal MI with TVR due to subacute stent thrombosis. When comparing TFA with TRA the incidence of 30-days MACE was significantly higher (5.7% vs 3.16, p 0.15), mainly due to higher mortality (5.7% vs 1.26%, p 0.02). A trend for higher incidence of major bleeding was evident for TFA vs TRA (1.3% vs 0%, p 0.20). Unadjusted risk of 30 days mortality was significantly associated with TFA (OR 12.05, 95% CI 1.50-96.5, p 0.019) and persisted (13.6, 95% CI 1.6-116, p 0.017) after multivariate adjustment for covariates.

Conclusion: TRA for STEMI pts undergoing pPCI is safe and effective. Preliminary data suggest that TRA may be associated with lower rates of short term mortality, probably by reducing the incidence of major bleeding.