Trans Radial Approach for Coronary Procedures Performed by an Experienced Operator is Safe Regarding Fluoroscopy Time and Contrast Media Volume

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Background: Trans-radial approach (TRA) to coronary procedure, compares to the femoral approach (TFA), reduces the rate of major vascular and bleeding complications and allows a similar rate of success and MACE. On the other hand the TRA was criticized lately as less safe since it increases fluoroscopy time (FT) and contrast media volume (CM).

<u>Purpose:</u> To evaluate FT and CM in coronary procedures performed by a single, highly experienced, operator in our medical center and to compare these parameters in the TRA versus the TFA with a reference to worldwide experience (W).

<u>Methods:</u> We reviewed the FT and CM data for all consecutive procedures performed in the last 12 months by a single operator with 80% of procedures done by the TRA after a two year learning curve. World experience was obtained from published articles.

Results: during the mentioned period 374 procedures were performed by a single operator (AF) with the following distribution:

	Total	PCI	PPCI	Post CABG	СТО	Bifurcation
TRA (%)	300 (80)	183 (49)	25 (7)	11 (3)	22 (6)	25 (7)
TFA (%)	74 (20)	46 (12)	8 (2)	63 (17)	14 (4)	6 (2)
Total (%)	374 (100)	229 (61)	33 (9)	74 (20)	36 (10)	31 (9)

The safety profile of the above procedures regarding FT and CM compared to world experience (W) is summarized below:

	TRA	TFA	TRA-W (range)	TFA-W (range)
FT (minutes)	6.9±3	8.7±4	10-19	10-16
CM (ml)	114.8±25	142±32	134-224	127-182

<u>Conclusions:</u> The TRA is as safe as TFA for simple as well as complex coronary procedures regarding FT and CM when performed by an experienced operator with a high volume of TRA procedures.