

51st CARDIOCON 2022: ABSTRACT

A QUANTIFICATION AND IMPACT OF INCOMPLETE REVASCULARIZATION USING RESIDUAL SYNTAX SCORE IN NSTEMI PATIENTS AFTER PERCUTANEOUS CORONARY INTERVENTION

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Objectives: The aim of this study was to assess the prognostic significance of rSS after PCI for NSTEMI in terms of all-cause mortality and MACE (Major adverse cardiac event) at 3 years of follow-up.

Methodology: A retrospective analysis of 115 consecutive NSTEMI patients who underwent PCI at the Aga Khan University Hospital Karachi between January 2016 and December 2016 was performed. 7 patients were excluded from the final analysis due to missing data (n=108). The SYNTAX scores before (baseline syntax=bSS) and after PCI (rSS) were calculated. Patients were stratified as CR if rSS =0, RICR if rSS >0 and ≤8 and ICR if rSS >8.

Results: Patients that achieved CR were 44 (40.7%), RICR were 40 (37.7%) and ICR were 24 (22.2%). After three-year follow-up, ICR patients had the highest incidence of both all-cause mortality [(CR) 4.5% vs. (RICR) 5% vs. (ICR) 37.5% respectively; p<0.001] and major adverse cardiovascular (MACE) defined as composite of follow up cardiac death, MI and revascularization [(CR) 5% vs. (RICR) 10% vs. (ICR) 50% respectively; p<0.001]. There was no difference in the incidence of all-cause death (4.5% vs. 5%; p=0.92) or MACE (4.5% vs 10%, p=0.332) in patients with CR and ICR respectively (Table 1).

Table 1: Outcomes at two years of follow-up according to residual SYNTAX score
 MACE- Major Adverse cardiac event (Cardiac death,MI or Revascularisation); CR- complete revascularization; RICR- Reasonable incomplete revascularization; ICR- Incomplete revascularization

	CR (rSS=0) N= 44	RICR (rSS >0 and ≤8) N= 40	ICR (rSS>8) N= 24	P value	CR vs RICR p value	CR vs ICR P value	RICR vs ICR P value
All cause death	2 (4.5)	2 (5)	9 (37.5)	<0.001	0.92	<0.001	0.001
Cardiac death	1 (2.3)	2 (5)	7 (29.2)	0.001	0.50	0.001	0.007
MI	1 (2.3)	1 (2.5)	8 (33.3)	<0.001	0.949	<0.001	0.001
Revascularization	1 (2.3)	3 (7.5)	3 (12.5)	0.25	0.261	0.087	0.51
MACE	2 (4.5)	4 (10)	12 (50)	<0.001	0.332	<0.001	<0.001

Conclusion: The residual SYNTAX score (rSS) is a useful tool in quantifying incomplete revascularization in patients undergoing PCI for NSTEMI. ICR appears to confer a higher three-year mortality and MACE, however outcomes for RICR and CR were comparable. Hence the calculation of rSS in daily practice may also be used to determine a reasonable level of revascularization in patients where complete revascularization may not be possible.

Keywords: anticoagulation, atrial fibrillation, Pakistan

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