

(4286.14) ng/ml, 2.21 (2.24) ms and 61.8 (7.8) % respectively. 6.0% had isolated cardiac siderosis without liver involvement and 85.5% of those with cardiac siderosis had normal LVEF. Liver siderosis prevalence was 83.0% (38.7% severe, 35.6% moderate and 25.7% mild) but only 15.8% had co-morbid cardiac siderosis. Overall, only liver T2* had statistically proven association with cardiac siderosis ($p < 0.001$).

Conclusion: The prevalence of cardiac siderosis among transfusion-dependent Thalassaemia patients was 16.8%; 6.0% cases of isolated cardiac siderosis without liver iron overload was seen in the study population. A significant association between cardiac siderosis and liver T2* emphasised the importance of CMR as a screening and surveillance tool to rule out cardiac and liver siderosis, and monitor disease progression.

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5. Prognostic Value of Leucocyte Telomere Length in Acute Myocardial Infarction

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Introduction: Leucocyte telomere length (LTL) has been described as a marker of biological age, endothelial dysfunction and atherosclerosis. The association between LTL and clinical characteristics of Asian patients, and their outcomes following acute myocardial infarction (AMI) have been inconclusive.

Objective: To investigate the relationship between LTL and developing AMI, the association of LTL with inpatient and 30-day mortality, and the comparison to LTL with established AMI risk scores in predicting these outcomes.

Methodology: 100 patients aged 30–70 years admitted with an AMI to a tertiary referral center between May–Oct 2017 were enrolled; these were matched with 100 non-AMI ('healthy') controls for gender and age (± 1 year). Clinical data was obtained prospectively; inpatient and 30-day outcomes documented. LTL was reflected by a well described variable called a tis ratio (TSR). The TSR was measured at enrolment using a quantitative PCR-based methods (qPCR) and results blinded to the clinician.

Results: The mean age of AMI patients was 52.2 ± 9.4 years, and 84% were male. Both groups were well matched for ethnic distribution, past history of dyslipidemia, lipid profile and BMI. There were more active smokers, known history of hypertension, diabetes and family history of AMI in the AMI group. There was no significant difference in the LTL in AMI patients compared healthy controls (0.7946 ± 0.0354 vs 0.7967 ± 0.0243 , $p = 0.619$). In AMI patients, younger patients (ie < 52.2 years) had a marginally lower LTL compared to controls (0.7887 ± 0.0459 vs 0.7903 ± 0.0253 , $p = 0.834$). There was a 2% cardiac mortality during index admission, and at 30-day follow up, with no difference in LTL (0.811 ± 0.0212 for cardiac mortality at 30-days vs 0.7943 ± 0.0356 , $p = 0.511$). There was also no association between LTL with coronary disease severity. LTL had no correlation with TIMI and GRACE scores for patients admitted

with AMI (For TIMI, Pearson $R = 0.018$, $p = 0.861$; for GRACE, Pearson $R = 0.033$, $p = 0.743$).

Conclusion: LTL length was similar in AMI patients and healthy controls. LTL length was not associated with inpatient and 30-day outcomes, and not associated with established AMI risk prediction scores. However, LTL was shown to be shorter in younger patients with AMI - therefore further studies warranted, including longer term clinical outcomes.

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6. A Pilot Study of the Stable Angina Record (Star): Translation and Validation of The Malay And Chinese Version

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Background: Stable Coronary Artery Disease (CAD) is a common and continuous disease with significant impact on patients' quality of life. Substantial variability exists between doctors' and patients' perception on the extent of symptoms resulting in inadequate treatment.

Objective: To translate and validate the Malay and Chinese version of the Stable Angina Record (STAR) as a self-administered tool to monitor the angina severity and degree of disability in stable CAD patients.

Materials & methods: Prior to the translation, content validity was assessed to suit the local settings and culture. The "forward-backward" technique was used to translate the STAR into the respective languages. Both translated tools were reviewed by an expert committee and clinic patients who fulfilled the inclusion criteria were recruited to complete the STAR-Malay (STAR-M) or STAR-Chinese (STAR-C) prior to consultation. Patients were to re-attempt the questionnaire one month later for reliability analysis. For categorical variables, Cohen's Kappa was calculated while Spearman's r value was used for frequency variables. Based on Field and Cade et al., large correlation coefficient, 2:0.5 indicates high reliability. The value of Kappa, indicating the measure of agreement is classified according to Sackett et al. as follows: 0–0.2 = slight; 0.2–0.4 = fair; 0.4–0.6 = moderate; 0.6–0.8 = substantial; > 0.8 = almost perfect.

Results: For both STAR-M and STAR-C group, 46 patients were recruited in each group. However, only 34 patients in each group completed both test and retest. Out of 68 patients with a mean age of 60.7 ± 9.6 years, 88.2% were male and 100% had CAD confirmed by angiography. Approximately 85% of patients had at least one anti-anginal medication while only 1.5% was on ranolazine. Correlation coefficients were high, > 0.60 for all categories of question in the STAR-C group. However, the correlation coefficients were slightly lower with approximately 70% of items achieving > 0.60 in the STAR-M group. The mean value for Cohen's Kappa and Spearman's r in the STAR-C and STAR-M were 0.807 and 0.846, and 0.650 and 0.666, respectively.

Conclusion: The STAR in both Malay and Chinese language had moderate to almost perfect test-retest reliability. Therefore, both STAR-M and STAR-C are reliable and validated tools in our multi-ethnic population.

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