**CORRELATION OF 2D AND 3D ECHOCARDIOGRAPHIC LEFT VENTRICULAR EJECTION FRACTIONS AMONG PATIENTS WITH ACUTE CORONARY SYNDROME**

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*Background:* Assessment of left ventricular ejection fraction provides valuable diagnostic, prognostic and therapeutic implications in patients with acute coronary syndrome. This study identified which 2D echocardiographic left ventricular ejection fraction index provides better estimate as compared to 3D echocardiography.

*Methods:* 54 subjects underwent 3D echocardiogram and 2D echocardiogram from July to December 2015. 2D echo left ventricular ejection fraction measurements were calculated using modified Simpsons, Quinones and Teicholz. 3D echo left ventricular ejection fractions used measurements of end-systolic and -diastolic volumes. Correlation of these methods used the following statistical tools: paired t-test, Pearsons correlation coefficient test, linear regression analysis, percentage variability and Bland-Altman plots.

*Results*: Paired t-tests of the mean differences between Teicholz and 3D echo showed significantly different result (p=0.0001). Linear regression graphs and Pearson correlation showed significant positive correlation with a correlation coefficient of 0.969 (p=0.0001) between modified Simpsons and 3D echo.

*Conclusion:* 2D echo calculation of ejection fraction using modified Simpsons compares well and has more positive correlation with 3D Echo as compared to Teicholz and modified Quinones. Modified Quinones and 3D echo also shows comparable results but with only moderate correlation. However, Teicholz showed significant difference with 3D echo but still with moderate correlation.