Association of high sensitive C - reactive protein (hs-CRP) with the severity of the left ventricular systolic dysfunction in acute anterior ST elevation MI

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High Sensitive C-reactive protein (hs- CRP) is an established risk marker in coronary artery disease. It is a marker of inflammation activated early after Acute Myocardial Infarction (AMI) and its quantity depends upon extent of myocardial damage. Releasing of inflammatory marker lead to cardiac remodeling which clinically manifested as Heart failure (HF) which is a common complication after acute anterior myocardial infarction (AMI). The prevalence of post-infarct Left Ventricular Systolic Dysfunction (LVSD) ranges from 27 to 60 % and half of patients having early post-infarct LVSD subsequently develop chronic heart failure. The purpose of this study is to show the association between hs-CRP with LVSD in AMI and early detection of HF.

Methodology & Theoretical Orientation: This is a cross-sectional analytical study in which hs-CRP was done among all the study subjects between 24-48 hours onset of AMI. The study populations were categorized into groups I, II, II according to the lowest to highest hs-CRP level, Transthoracic echocardiography was done between 24-48 hours of anterior ST Elevation Myocardial Infarction (STEMI). Then LVSD was assessed between those groups and searched for association.

Findings: Severely reduced ejection fraction (EF) was found in patients of group III only. Severe and moderately reduced in EF was found significantly more in group III and II than group I (p<0.001).

Conclusion & Significance: High level of hs-CRP in patient of acute anterior STEMI patients is associated with moderate to severe reduction in EF and Fractional Shortening (FS). So hs- CRP can be a prognostic marker in acute anterior STEMI complicating LVSD and early management can improve the short and long term prognosis.

Biography
Aparna Rahman has done her expertise in cardiac cases evaluation and passion in improving the health and wellbeing of general population. She has completed her MD course in cardiology from Dhaka University. She has been serving as a Physician in Bangladesh Institute of Research and Rehabilitation for Diabetes, Endocrine and Metabolic disorders (BIRDEM) General Hospital for a long time. She is connected with medical educations, research and publications. This approach is responsive to all stakeholders and has a different way of focusing.

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