**CORRELATION BETWEEN DIASTOLIC DYSFUNCTION AND BODY MASS INDEX WITH ABNORMAL LIVER FUNCTION TEST (LFT)**

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Objective: To determine if there is any association between abnormal LFT and the severity of diastolic dysfunction (DD) or BMI in patients with left ventricular. Background: Cardio-hepatic syndrome is a well known syndrome in patients with heart failure and an abnormal LFT is expected to correlate with the severity of the congestion. Similarly, obesity is known to correlate with abnormal LFT secondary to nonalcoholic steatohepatitis and metabolic syndrome.

Methods: A retrospective 2 years echo data was reviewed. Patients with DD with preserved systolic function were included. 841 patients were classified according to the severity of DD into three categories; impaired relaxation, pseudonormal relaxation and restrictive. Patients were also classified into 2 categories of BMI>30 and BMI<30. LFT results were recorded and compared among the groups.

Results: The prevalence of AST elevation (>40 IU/L) in patients with DD was 23.4%, for ALT (>51 IU/L) it was 11.6% and 20% had abnormal Alkaline phosphatase

(ALP>122 IU/L). The data analysis did not show any statistically significant correlation between abnormal LFT and the severity of the DD (P: 0.814, P: 0.962, P: 0.95 respectively) For the BMI categories, the only significant finding was an AST elevation in 20% of patients with BMI>30 and 26.4% with BMI<30 (P 0.041).

Conclusion: In patients with DD, abnormal LFT is a common finding; however it doesn’t correlate with the severity of DD. AST elevation is less frequent in patients with DD and BMI>30