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## Correlations of Serum MMP-9, TIMP-1, TGF- $\beta$ and bFGF Levels with Atrial Fibrillation in Patients without Structural Heart Disease

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ABSTRACT The researchers aimed in highlighting the correlations of serum MMP-9, TIMP-1, TGF-β1 and bFGF levels with atrial fibrillation (AF) within diseased persons showing no structural heart ailment. A total of 236 eligible diseased persons had been categorized within AF category (n=168) and non-AF category (n=68). Left atrial diameter (LAD), left ventricular end-diastolic dimension (LVEDD) and left ventricular ejection fraction (LVEF) had been measured through cardiac ultrasonography. Comparing concerning non-AF category, AF class had larger LAD and smaller LVEF (P<0.01). MMP-9 and TGF-β1 levels had been higher while TIMP-1 level remained less within AF class as compared to non-AF class (P<0.01). Age, LVEF and left atrial MMP-9/TIMP-1 remained free correlative factors of AF (P<0.01). MMP-9/TIMP-1 remained definitely correlated concerning LAD within AF class (r=0.509, P<0.01). Left atrial MMP-9/TIMP-1 remained higher within diseased persons regarding persistent AF (P<0.01). Left atrial MMP-9/TIMP-1 is correlated with AF within diseased persons having no structural heart ailment, particularly in the case of persistent AF.