Zulqurnain Khan et al., J Tissue Sci Eng 2018, Volume 9
DOI: 10.4172/2157-7552-C4-054

# Role of endothelial biomarkers in patients with coronary artery disease

**Naglaa K Idriss[1], Aliaa AY Mosa[1], Abdel- Rahim MA Maeki[1], Doua A Fouad[2], Hosney Ali Hassen[1], Mahmoud Abdelsabour[2]** and **Sherif Sayed[3]**
[1]Department of Medical Biochemistry, Faculty of Medicine, Assuit University Egypt
[2]Department of Cardiology Assuit University , Egypt
[3]Department of Anaesthiology Assuit University , Egypt

**Background:** Several studies have suggested that cytomegalovirus infection is likely connected with an increased relative risk of Coronary artery diseases (CAD) nevertheless, the consequences are contradictory. Growth-differentiation factor 15 (GDF-15) is an independent marker of the long-term risk for both CAD and cancer morbidity beyond clinical and biochemical risk factors. The objective was to establish markers of CAD in relation to GDF-15 levels and their implication in disease progression . Ultimately, this would then enable us to identify patients at risk and develop novel strategies for future treatment and prevention of heart diseases in our country. The present study will be carried on 45 patients attending to cardiology department with coronary artery disease (age 20-55 years).and with or without Cytomegaloviurs As a control group, we will include 45 age-matched patients with normal angiogram. The patients selected will lack any history of cancer, inflammatory disease, immune disorders or severe comorbidity. Methods Clinical data and blood samples were collected; all samples were extracted for RNA and cDNA synthesis and then RT-PCR will be performed on an ABI PRISM 7700 Sequence Detector The primer pair for *GDF*-15 was: *GDF*-15(forward: *CAC ACCGAAGACTCCAGA*, reverse: *CCGAGAGATACGCAGGT*; Amplicon size 78 bp). Results: Growth differentiation factor-15 protein levels were significantly increased in human with CAD. The anti-HCMV IgG was independently associated with prevalent coronary artery disease (OR = 1.89, 95% CI = 1.08~ 2.9, p = 0.01) after adjusting for age, sex, hemoglobin, diabetes,.

**Conclusion:** *GDF*-15 rallies prediction of both cardiovascular and morbidity beyond conventional risk factors and biomarkers of cardiac diseases. We have uncovered a linkage between CMV and *GDF*15, a new evidence that could be important in the pathogenesis of endothelial inflammation.

## Biography

Dr Naglaa Kamal Idriss MBBcH,MSc,MD. Assistant Professor of Medical Biochemistry, Faculty of Medicine, Assuit . PHD Birmingham University, City hospital, United Kingdom2008, Post doctoral visiting researcher at Southampton University General hospital UK,2016. She has 48 published articles https://www.researchgate.net/profile/Naglaa_Idriss3. She is member for European society of cardiology(ESC) and international stem cell research society(ISSRS), Acute Cardiovascular care association member (ACC), Member of working group of thrombosis (W.G Thrombosis) and Society of heart valve diseases SHVD

naglaaidriss@hotmail.com

**Notes:**