Key players of nitric oxide production as novel biomarkers for coronary artery disease

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Cardio-vascular disease (CVD) remains the leading cause of death worldwide. Coronary artery disease (CAD) represents the major CVD among several populations. Despite huge efforts and great advances in studying the genetic component of CAD, there is still a great need for exploring the genetic and environmental factors contributing in the development of this disease. Among these factors emerge modulation of Nitric Oxide (NO) homeostasis and oxidative stress as central players according to recent reports. A range of biochemical disturbances including reduced availability of NO and oxidative stress has been shown to be associated with Endothelial Dysfunction (ED). Many studies described the contribution of ED in the predisposition of CAD; in particular Myocardial Infarction (MI). Recent evidence indicates that ED may be genetically determined. This presentation points out to the key players that influence vascular NO levels and their role in the protection and/or predisposition to CAD.

Biography
Mohamed Zakaria Gad is Professor and Head of Biochemistry Department at German University in Cairo. He graduated 1st of 500 from Pharmacy, Cairo University and completed PhD from Medical College of Pennsylvania, USA. He worked as Professor/Head of Biochemistry at Cairo, October 6 and Helwan Universities, Vice-Dean for Research and Graduate Studies at Ain Shams University, Chief Coordinator of TEMPUS Curriculum Development Project in Pharmacy (5 European and 3 Egyptian Universities). He received Fellowship from American Heart Association and National Promotional Prize in Biomedical Sciences (2002) and also received STDF grant from National Academy of Science (2011-2014). He is a Board Member of Egyptian National Committee of Biochemistry and Molecular Biology and a Reviewer to several scientific journals. He has 56 publications and 65 conference abstracts, published selected articles in "Biology of Nitric Oxide" book, Portland Press, 2000, was the Principal Author and Editor of book: A Model Pharmacy Curriculum: An Egyptian-European Experience, Higher Education Academy, UK.

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