## conferenceseries.com

JOINT EVENT ON

## 2<sup>nd</sup> International Conference on **Hypertension & Healthcare**

and

### 2<sup>nd</sup> International Conference on Non-invasive Cardiac Imaging, Nuclear Cardiology & Echocardiography

September 11-13, 2017 | Amsterdam, Netherlands

# Relationship of nitric oxide genotype to diabetic nephropathy and atherosclerosis of type 1 diabetic patients

Soha M Abd El Dayem<sup>1</sup>, Ahmed A battah<sup>2</sup>, Abo El Maged El Bohy<sup>2</sup> and Solaf Ahmed<sup>1</sup> <sup>1</sup>National Research Centre, Egypt <sup>2</sup>Cairo University, Egypt

**Objective**: Assessment of nitric oxide genotype in diabetic patients and to evaluate its relationship to diabetic nephropathy and atherosclerosis of type 1 diabetic patients.

**Patients and methods**: The study included 65 type 1 diabetic patients and 30 age and sex matched healthy volunteers. The mean age of patients was  $17.99 \pm 2.59$ , mean duration of diabetes was  $10.91 \pm 3.54$ , and mean onset of disease was  $7.00 \pm 3.28$ . Blood samples were taken for assessment of parameters like glycosylated haemoglobin (HbA1), lipid profile, oxidized low-density lipoprotein (OxLDL) and serum level of nitric oxide by enzyme linked immunosorbent assay (ELISA) technique. Also, nitric oxide genotype was done. Urine samples were taken for assessment of albumin/creatinine ratio. Carotid intima-media thickness (cIMT) and Renal Doppler via ultrasound were also done.

**Results**: Nitric oxide was significantly lower, while lipid profile, OxLDL and albumin/creatinine ratio, cIMT and resistivity index were significantly higher in diabetic patients. No significant difference of nitric oxide genotype was found in diabetics and control. Nitric oxide was significantly lower, while OxLDL, albumin/ creatinine ratio and lipid profile were significantly higher in nitric oxide homozygous genotype.

**Conclusions**: Diabetic patients had a low level of nitric oxide and early atherosclerosis. Nitric oxide homozygous genotype is associated with diabetic nephropathy and atherosclerosis.

#### Biography

Soha Abd El Dayem is working in the Medical Service Unit in National Research Center as a Consultant of Diabetes and Endocrinology. She is also working in Health Insurance as a Consultant of Diabetes and Endocrinology. She is a consultant of Pediatrics in Suzan Moubarak Hospital. She is the member of Society of Egyptian Society of Cardiology.

S\_eldayem@Yahoo.com