DIAGNOSTIC VALUE OF B-NATRIURETIC PEPTIDE, ANKLE BRACHIAL INDEX AND CAROTID DOPPLER IN DETECTION OF SUB-CLINICAL CARDIOVASCULAR DISEASE IN TYPE 2 DIABETIC PATIENTS.

- Ghada Abd-Elrahman Mohammad(1), Moustafa E M Radwan(2), M. Hossam Maghraby(1), Essam Abdel-Mohsen(1), Mohamed Z Abd Elrahman(3)

Abstract:

Background: Diabetes is important as a cause of cardiovascular disease (CVD), ranging from asymptomatic ischemia to clinically evident heart failure. Therefore, early identification of sub-clinical CVD in diabetic patients may be particularly important in leading to early initiation of treatment. The aim of the present study was to identify role of BNP (Brain natriuretic Peptide), Ankle Brachial Index (ABI) and carotid Doppler in detection of sub-clinical CVD in type 2 diabetic patients. Patients and methods: BNP was measured in 60 consecutive diabetic patients (patients group) whom were attended internal medicine outpatient clinics or admitted at endocrinology unit of Assiut university hospital. Another 40 patients; were chosen as (control group) their age and sex matched with patients. Echocardiography examinations were performed to all participants. ABI measurements were conducted on all study participants. Carotid intima Media Thickness (CIMT) and carotid Plaque were evaluated by Carotid Doppler Ultrasonography, along with the determination of anthropometric parameters, HbA1c, lipid profile, assessment of diabetic retinopathy, nephropathy, and neuropathy, in patients with type 2 diabetes mellitus (T2DM). Results: Our study revealed 11 patients had Left ventricular hypertrophy (LVH), 20 patients had Left Ventricular Diastolic Dysfunction (LVDD), and no systolic dysfunction were detected. BNP were independent determinants of mild to moderate LVDD. Prevalence of a low ABI (Published In: