ASSOCIATION OF VISFATIN WITH CHRONIC KIDNEY DISEASE IN PATIENTS WITH AND WITHOUT DIABETES

Thesis

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by

Samer Samir Zekry (M.SC.)

Supervisors

Dr. Maher AboBakr Al Amir Professor of Internal Medicine, Faculty of Medicine, Fayoum University

Dr. Mohamed Abd EL-HadyMashahit Professor of Internal Medicine,

Faculty of Medicine, Fayoum University

Dr. EhabAbdelbadeeh Hassan Associate Professor of Internal Medicine, Faculty of Medicine, Fayoum University

Dr. Hoiyda A. Abd EL- Rasol
Associate professor of Clinical and Chemical Pathology,
Faculty of Medicine, Fayoum University

Fayoum University

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Abstract

Introduction:Chronic kidney disease (CKD) has become a global public health threat. The irreversible nature of the disease, its association with significant morbidity and mortality as well as the cost of renal replacement therapy leads to a large burden for health care providers, particularly in developing countries like Egypt.

Objective: to find a non-invasive method to evaluate association of serum visfatin with chronic kidney disease secondary to diabetic nephropathy and compare to patients with chronic kidney disease secondary to other causes.

Methods: Ninety individuals including 30 healthy controls and 60 patients of CKD were included in thisstudy. Patients with CKD were further grouped based on etiology of CKD into 30 diabetic patients and 30 non-diabetic patients. Patients with type 1 diabetes mellitus, urinary tract infection, urolithiasis, liver cirrhosis, stroke, ischemic heart disease, and rheumatoid arthritis were excluded. Measurement of serum visfatin was done through ELISA Kit (Elabscience pharmaceuticals).

Results: Visfatin concentration was significantly high in patients with CKD compared to controls (p < 0.001). No significant difference in Visfatin concentrations between patients of CKD with and without diabetes was detected (p > 0.05). Visfatin concentration was significantly high in patients with CKD stage 2 compared to CKD stage 1 (p < 0.001).

Conclusion: The present study confirms the association of visfatin with CKD, however further studies at molecular level to check its expression within renal tissue may clarify its definitive role in CKD.