

Abstract

Saudi J Kidney Dis Transpl. 2008 May-Jun;19(3):420-7.

Association of Serum Lipoprotein (a) with Hypertension in Diabetic Patients.

Nasri H.

Hemodialysis Section, Department of Medicine, Hajar Medical Educational and Therapeutic Center, Shahrekord University of Medical Sciences, Shahrekord, Iran.

OBJECTIVE: To evaluate the influence of serum Lp(a) concentration on hypertension in patients with diabetes mellitus (DM) and under treatment with oral hypoglycemic agents or insulin injections.

METHODS: We studied 122 patients, 82 females and 40 males with a mean age of 63 +/- 10 years and duration of DM and HTN of 7.4 +/- 5.8 and 3.2 +/- 4.6 years, respectively. The mean systolic and diastolic blood pressure (BP) were 138 +/- 23 mmHg and 83 +/- 12 mmHg, respectively. In this cross-sectional study, we measured serum lipoprotein(a) (Lp(a), glycosylated hemoglobine (HbA1c) and other lipids while the patients were receiving either oral hypoglycemic agents or insulin. In addition, body mass index (BMI) and creatinine clearance (CrCL) were assessed.

RESULTS: The mean serum Lp(a) was 22.2 +/- 24.7 mg/dl (median: 18.3 mg/dl), and serum Lp(a) levels > 30 mg/dl was found in 29 (23.8%) patients. There were significant positive correlations of duration of DM and duration of hypertension, and serum Lp(a) levels with of systolic and diastolic levels of BP. However, a significant inverse correlation of serum Lp(a) with CrCL were observed.

CONCLUSION: This study suggests that kidney function is an independent determinant of Lp(a) and HTN in diabetic patients. Furthermore, Lp(a) in diabetic patients may have important implications for the increased susceptibility to vascular disease in these patients.

PMID: 18445903

FREE FULL TEXT

