Association of depression with type 2 diabetes and relevant factors

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Background: Based on the high prevalence of diabetes and depression in Rasht, we conducted a study to evaluate the prevalence of depression in type 2 diabetic patients, and its association with glycemic control, chronic complications, and some clinical and paraclinical parameters in this northern state of Iran.

Materials and Methods: Beck depression inventory was used for evaluating depression on 90 type 2 diabetics and 90 healthy controls selected. Information on demographic and clinical and paraclinical characteristics was collected by interviews and from medical records.

Results: This cross-sectional study was performed on 90 type 2 diabetic patients (63 female and 27 male with a mean age of 54.17 ± 10.57 years) and 90 healthy matched controls. Overall, depression was significantly more prevalent in case group [37.8% vs. 16%, odds ratio (OR) = 3.29, P = 0.001]. The prevalence of depression in diabetic women was significantly higher than nondiabetic ones (39.7% vs. 15%, P = 0.002). We could not find any significant correlation between depression and positive family history of depression, duration of diabetes, HBA1c level, and body mass index. The prevalence of depression was prominently more in diabetic patients with retinopathy than in those without this complication (55.6% vs. 24%, P = 0.015). Logistic regression analysis indicated that diabetes itself was the only significant determinant of having depression (OR = 3.29, P = 0.005, 95% confidence interval: 0.118-0.667).

Conclusion: There was a prominent prevalence of depression in type 2 diabetics overall. Depression was not correlated with duration of diabetes and glycemic control. There was a significant association between depression and retinopathy in diabetic patients. Diabetes itself was the only significant determinant of having depression after matching with other variables.

Key Words: Depression, diabetes complications, diabetes, glycemic control