Estimation of thyroid profile in Type II diabetes mellitus.

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Abstract:

Introduction: Type 2 diabetes mellitus (T2DM) is associated with increased incidence of thyroid dysfunction (TD). The coexistence of thyroid dysfunction in T2DM patient is an important barrier in achieving treatment goal. The present study was aimed to know the status of thyroid dysfunction in T2DM in patients. Materials and Method: This is a retrospective observational study of thyroid hormones in 100 diagnosed T2DM patients based on American Diabetes Association (ADA) criteria attending the department of medicine. Thyroid dysfunction was classified on the basis of American Thyroid Association (ATA) criteria. Results: Thyroid dysfunctions were more in diabetic group compared to control group (24% versus 5%). This was statistically significant with P value <0.05. Subclinical hypothyroidism was more in diabetic group compared to control group (12% versus 3%, P value <0.01). Hypothyroidism was again more in diabetic group compared to control group (9% versus 1%, P value < 0.02). Conclusion: This study showed high prevalence of thyroid dysfunctions in patients of type 2 diabetes mellitus. Hence, we conclude that screening for thyroid dysfunction among patients with diabetes mellitus should be routinely performed, so as to recognize these dysfunctions early. The coexistence of hypothyroidism or hyperthyroidism with diabetes mellitus leads to increase complications. The ability to early diagnose and treat unsuspected thyroid dysfunctions and those patients whose conditions are difficult to manage in diabetics may result in reduced morbidity and mortality and improve quality of life.

Key Words: Thyroid dysfunction (TD), Tetra-iodothyronin (T4), Tri-iodothyronin (T3), Thyroid stimulating hormone (TSH), Type 2 diabetes mellitus (T2DM).

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