

THYROID FUNCTIONS AND THYROID ANTIBODIES

IN DIABETES MELLITUS

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اقْرَأْ بِاسْمِ رَبِّكَ الَّذِي خَلَقَ

خَلَقَ الْإِنْسَانَ مِنْ عَلَقٍ

اقْرَأْ وَرَبُّكَ الْأَكْبَرُ الَّذِي عَلَّمَ بِالْقَلَمِ

عَلَّمَ الْإِنْسَانَ مَا لَمْ يَعْلَمْ

الساقي، ١٠٠

I declare that this Thesis has been composed by myself and that the work of which it is a record has been done by myself. It has not been submitted for a degree at this or any other university

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Abstract

This study includes 20 healthy controls and 73 adult diabetic patients; 38 were IDDM (19 males and 19 females) and 35 were NIDDM (14 males and 21 females). All the poorly controlled diabetic patients with or without complications showed thyroid hormone abnormalities. HbA_{1c} was used as an index of hyperglycemia. TSH, T₃, T₄, insulin and anti-thyroid peroxidase (anti-TPO) antibody levels were estimated for the patients and controls, by using EIA and RIA methods, serum T₃ was decreased in all uncontrolled diabetic subgroups in both types (IDDM and NIDDM). There was a negative correlation between T₃ and HbA_{1c}. T₄ levels were significantly higher in NIDDM patients than those in the IDDM and control group. TSH levels were significantly higher in the uncontrolled diabetic patients than in the controls. Serum anti-TPO ab levels were higher in uncontrolled diabetics subgroups. In the present study 30.6% of the IDDM and 20% of the NIDDM patients had positive anti-TPO ab.

All the previous abnormalities in the levels of TSH, T₃, T₄ and anti-TPO ab were not detected in well controlled diabetic patients. Meanwhile non significant difference was found between the levels of the previous parameters in IDDM versus NIDDM group. Thus thyroid function and thyroid autoimmunity should be screened annually in diabetic patients to detect asymptomatic thyroid dysfunction, and to avoid some of the pit-falls that can occur when these two diseases exist in the same patient.

