Screening and management of dysthyroidism : A Study of 601 Cases

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Introduction:

The current guidelines are not clear regarding the procedures for screening and management of dysthyroidism in patients with type 2 diabetes (T2D).

Objective :

The aim of this study was to evaluate the relevance of systematic screening for dysthyroidism in patients with T2D.

Material and Methods :

This is a retrospective descriptive study conducted over a period of 20 months (from July 2022 to February 2024). We analyzed all requests for the systematic measurement of TSH (Thyroid-Stimulating-Hormone) in patients with T2D who were followed in various departments of our hospital. Dyslipidemia was considered in case of disturbance of the following lipid parameters: LDL-C ≥ 4 mmol/L, Total Cholesterol > 5 mmol/L, and Triglycerides ≥ 1.7 mmol/L. Blood glucose levels were considered pathological if > 6.5 mmol/L.

Results :

- We counted a total of **601** requests.
- The average age of the patients was **61.77±9.76** years with a range from **25** to **93** years.
- The gender ratio (F/M) was **1.6**.
- Clinical signs related to the duration of T2D were found in **20%** of patients **(figure 1) .**
- Dyslipidemia was observed in **12.5%** of patients.
- The average TSH was **2.66±1.78** m IU/L.
- Dysthyroidism was confirmed in 8% of suspicions, including 1% peripheral hypothyroidism, **6%** subtle cases, and **1%** hyperthyroidism **(figure2).**
- No significant correlation was confirmed between serum TSH levels on one hand and lipid profile parameters and blood glucose on the other hand.
- These correlations were not found in the dysthyroidism group either.

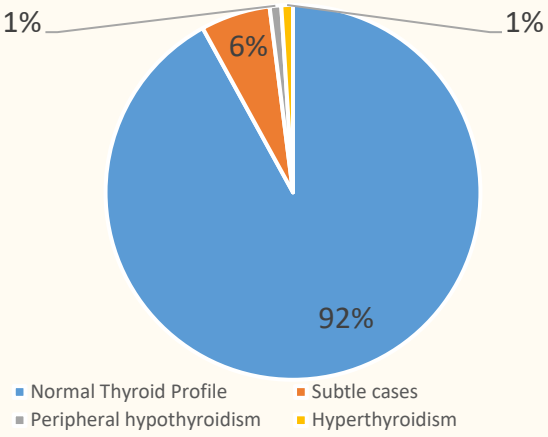

Figure 2: Results of the Thyroid Function Test

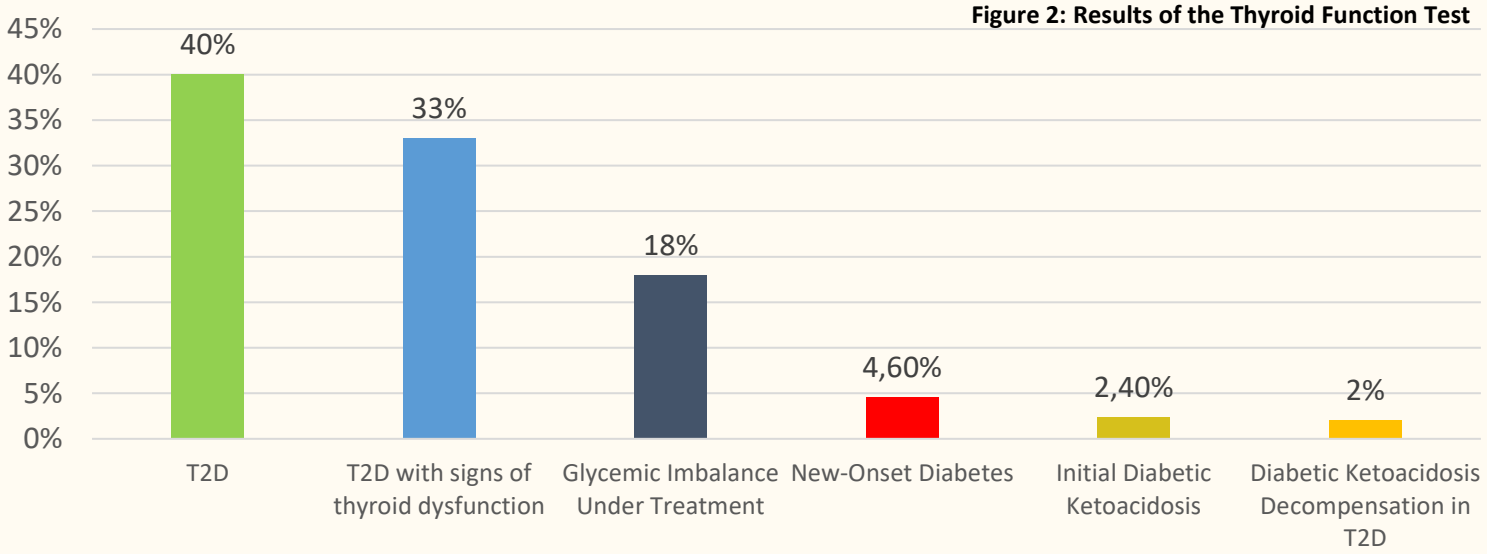

Figure 1: Indications for Thyroid Function Testing

Discussion :

- Screening for thyroid dysfunction in patients with T2D aims to prevent the risk of cardiovascular complications that can be exacerbated by this association. However, various guidelines do not recommend systematic screening due to a lack of evidence supporting its effectiveness. Our results provide support for this approach.

Conclusion :

Various guidelines do not recommend systematic screening due to a lack of evidence of its effectiveness. Our results support this choice.