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Treatment of Hypothyroidism in the Middle East

Hypothyroidism, a deficiency of thyroid hormone usually caused by primary thyroid failure, is a common clinical problem. Levothyroxine therapy (LT4) is demonstrated to improve signs, symptoms, and biochemical abnormalities and improve life.[1] However, a recent online survey published by the American Thyroid Association (ATA) illustrates that 10%–15% of hypothyroid patients are not satisfied with their therapy, and the challenge facing practicing physicians is to investigate alternative methods of replacing thyroid hormone deficiency.[2]

Almost a decade ago, the American Association of Clinical Endocrinologists, in collaboration with the ATA, published clinical practice guidelines and recommendations for diagnosing and treating adults with hypothyroidism.[3] This was followed by a brief, updated, and very practical version from the Italian Association of Clinical Endocrinologists published in 2016.[4] Unfortunately, it is not clear how widely these guidelines are accepted and their impact on practice patterns by endocrinologists.

A 2013 survey of clinical endocrinologists cataloged treatment patterns in hypothyroidism reported the following: universal preference for LT4 therapy; use of age-specific therapeutic thyroid stimulating hormone (TSH) targets; a highly variable approach to LT4 replacement; and exceptional attention to TSH targets in pregnant women.[5] It seems clear that there is much debate about strategies for thyroid hormone replacement in hypothyroidism.

In this issue of the Journal, Beshyah *et al*. report on results of an online survey of practice patterns in the management of hypothyroidism by physicians in the Middle East and North Africa.[6] They show that overt hypothyroidism would be treated with LT4 alone by 97.2% of respondents, and only 1.7% would consider combination T4 plus T3 therapy. The rate of replacement would be gradual in most cases (66.5%); a target TSH of 2.0–2.9 mU/L and 3.0–3.9 was preferred in 34.4% and 26%, respectively. Persistent hypothyroid symptoms after LT4 therapy when target TSH is achieved would prompt 86.9% of respondents to further investigate, with only 5.8% selecting combination T4 plus T3 therapy. Respondents (45%) to the current survey preferred to keep TSH values below 2.4 mU/L in first-trimester pregnancy, with thyroid tests repeated at 4-week intervals by most. The authors note that the survey revealed a high preference for LT4 therapy, a low preference for treating subclinical hypothyroidism; attention to TSH levels in pregnant and prepregnant women; and a highly variable approach to thyroid therapy for hypothyroidism.

These authors are to be congratulated for outlining thyroid practice patterns in the Gulf area and North Africa. Results show similar trends as that were found by researchers in North America.[5] Nevertheless, a larger number of respondents would have increased the strength and conclusions of this survey. It also shows that endocrinologists everywhere are applying new guidelines to their practice. Further research into this area would help endocrine patients and endocrinologists who face dilemmas in their daily practice.

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Compliance with ethical principles

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Data availability

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Hossein Gharib

Mayo Clinic College of Medicine, Rochester, MN, USA

Address for correspondence: Prof. Hossein Gharib, Mayo Clinic College of Medicine, Rochester, MN, USA.
E-mail: gharib.hossein@mayo.edu

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References

1. Almandoz JP, Gharib H. Hypothyroidism: Etiology, diagnosis, and management. Med Clin North Am 2012;96:203-21.
2. Peterson SJ, Cappola AR, Castro MR, Dayan CM, Farwell AP, Hennessey JV, *et al.* An online survey of hypothyroid patients

demonstrates prominent dissatisfaction. Thyroid 2018;28:707-21.
3. Garber JR, Cobin RH, Gharib H, Hennessey JV, Klein I, Mechanick JI, *et al.* Clinical practice guidelines for hypothyroidism in adults: Cosponsored by the American Association of Clinical Endocrinologists and the American Thyroid Association. Thyroid 2012;22:1200-35.
4. Guglielmi R, Frasoldati A, Zini M, Grimaldi F, Gharib H, Garber JR, *et al.* Italian association of clinical endocrinologists statement-replacement therapy for primary hypothyroidism: A brief guide for clinical practice. Endocr Pract 2016;22:1319-26.
5. Burch HB, Burman KD, Cooper DS, Hennessey JV. A 2013 survey of clinical practice patterns in the management of primary hypothyroidism. J Clin Endocrinol Metab 2014;99:2077-85.
6. Beshyah SA, Sherif IH, Mustafa HE, Saadi HF. Patterns of clinical management of hypothyroidism in adults: An electronic survey of physicians from the Middle East and Africa. J Diab Endo Practice 2021;4:75-82.

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