

Review of: "[Short Communication] Advisory caution message on retail packaging of Levothyroxine and its significance in the treatment of hypothyroidism"

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Potential competing interests: No potential competing interests to declare.

This is a very interesting short communication. The treatment of subclinical hypothyroidism seems simple, but it actually contains many problems that need attention. With the increase in the incidence of thyroid diseases, there are more requirements for the professionalism and quantity of general practitioners. As stated in the article, "We can't expect every GP to be knowledgeable in all domains of medicine." Therefore, the education to patients is even more important. Indeed, there are differences in the labeling of levothyroxine (L-T4) in developing and developed countries. "Advisory Caution" could significantly help in healthcare and reduce the burden of new morbidities due to side effects of L-T4. In addition to the side effects of drug (L-T4)-induced subclinical hyperthyroidism described in the article, we also found that drug-induced subclinical hyperthyroidism could lead to cognitive impairment, including attention, short-term memory impairment, and word selection anomia [1]. None of the current L-T4s for hypothyroidism are perfect. Due to the different etiology of hypothyroidism, not all patients with hypothyroidism need L-T4 treatment, and perhaps a mixed drug treatment of L-T3+L-T4 is needed, but which is controversial. According to current guidelines, it is important to reach the target serum TSH level for the treatment of hypothyroidism. In my opinion, an appropriate and highly experienced general practitioner is mandatory for determining the target serum TSH level. Moreover, an individual shared decision-making is needed to determine the appropriate dose of L-T4. Sometimes, an individualized therapeutic schedule is more necessary than mandatory to follow the guidelines [2].

1. Jin S, Yang YT, Bao W, et al. Naming difficulties after thyroid stimulating hormone suppression therapy in patients with differentiated thyroid carcinoma: a prospective cohort study. *Endocrine*. 2019;65(2):327-337.

2. Jin s. *Advances in Thyroid Diseases*, 1th edn. Liaoning Science and Technology Publishing House, Shenyang, 2021