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LETTER TO THE EDITOR

Re: Thyroid Dysfunction in Children with Idiopathic Nephrotic Syndrome Attending a Paediatric Hospital in Qazvin, Iran

Dear Editor,

I read with interest the case-control study by Saffari *et al*. published in the November 2020 issue of SQUMJ.[1] Among a cohort of Iranian children, Saffari *et al*. compared thyroid hormone levels between patients with nephrotic syndrome (NS) and healthy controls as well as between patients with NS in the active stage of the disease and those in remission. They found that increased thyroid-stimulating hormone (TSH) levels were more common in patients with NS in comparison with controls (34.2% versus 10.8%; $P = 0.001$). A significantly lower number of patients with active disease were euthyroid in comparison with those in remission (51% versus 95.8%; $P = 0.001$). Furthermore, 9.5% of patients in the active and no patient in the remission stage had abnormal free thyroxine levels ($P < 0.001$), while 14.3% and 0% had highly increased TSH levels, respectively ($P = 0.002$).[1] In patients with NS, the rates of subclinical hypothyroidism (34.7%) and overt hypothyroidism (14.3%) were significantly higher compared to controls (4.2%; 0% respectively; $P = 0.001$). Based on the reported prevalence of subclinical (34.7%) and even overt hypothyroidism (14.3%), Saffari *et al*. recommended that thyroid screening tests might be needed for patients with NS.[1] They also mentioned two study limitations, namely small sample size and short follow-up period that did not allow adequate detection of hypothyroid subsidence in cases of subclinical hypothyroidism. It is worth mentioning that the correct evaluation of thyroid health status is centred on the use of suitable reference intervals (RI) of the thyroid function tests (TFT) to evaluate the readings of different components of TFT. There are certain determinants of RI of TFT for a particular population that must be taken into consideration such as age, gender, body mass index and genetic variants.[2] Iran is among the pioneer countries that have already formulated their own RI of TFT to be utilised in researche centres and clinical fields.[3] Instead of using a local standard, Saffari *et al*. mentioned in the study methodology that they referred to the foreign RI of TFT to define subclinical hypothyroidism and hypothyroidism.[4,5] Accordingly, this limitation might question the accuracy of the study results and recommendation.

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