CORRESPONDENCE

Prediction of Transient or Permanent Congenital Hypothyroidism

We read with interest the study on predicting the course of hypothyroidism based on initial thyroid stimulating hormone (TSH) levels and dose of L-thyroxine at 12 and 24 months [1]. This is a common dilemma faced by the clinicians while treating congenital hypothyroidism and deciding on the extent of work-up needed. We have two observations in this well conducted study.

The female gender prediliction noted to an extent of 2:1 is very interesting. Although there is some female prediliction noted in the studies, most of it is non-significant [2]. It would be interesting to explore the reason for such a high female prediliction in this cohort.

The TSH cut-off used to diagnose congenital hypothyroidism and start thyroxine replacement therapy was 10 μ IU/mL, while recent guidelines suggest a cut-off of 20 μ IU/mL [3]. This could have three consequences: (*i*) the number of cases labelled as transient hypothyroidism (TH), but not permanent hypothyroidism (PH), can increase because of lowered cut-off as shown in some previous studies [4]; (*ii*) there is a risk of overtreating euthyroid neonates and a possible increase in behavioural problems in later life [5]; and (*iii*) the

difference in TSH levels at diagnosis could have achieved statistical significance because of possible inclusion of euthyroid neonates in TH group, a finding not noted in previous studies.

RAJENDRA **P**RASAD **A**NNE* AND **E**MINE **A R**AHIMAN

Department of Pediatrics, PGIMER, Chandigarh, India. *rajendra.omc@gmail.com

References

- Scavone M, Carboni E, Stefanelli E, Romano G, Vero A, Giancotti L, Miniero R, *et al.* Prediction of transient or permanent congenital hypothyroidism from initial thyroid stimulating hormone levels. Indian Pediatr. 2018;55: 1059-61.
- 2. DeMartino L, McMahon R, Caggana M, Tavakoli NP. Gender disparities in screening for congenital hypothyroidism using thyroxine as a primary screen. Eur J Endocrinol. 2018;179:161-7.
- Léger J, Olivieri A, Donaldson M, Torresani T, Krude H, Van Vliet G, *et al.* European Society for Paediatric Endocrinology Consensus Guidelines on Screening, Diagnosis, and Management of Congenital Hypothyroidism. Hormone Res Pediatr. 2014;81:80-103.
- Kara C, Günindi F, Yýlmaz GC, Aydýn M. Transient congenital hypothyroidism in Turkey: An analysis on frequency and natural course. J Clin Res Pediatr Endocrinol. 2016;8:170.
- Bongers-Schokking JJ, Resing WC, Oostdijk W, de Rijke YB, de Muinck Keizer-Schrama SM. Relation between early over-and undertreatment and behavioural problems in preadolescent children with congenital hypothyroidism. Hormone Res Pediatr. 2018;90:247-56.

Editor's note: The corresponding author of the manuscript did not respond to above comments.