

# Comment on "The Effects of Thyroid Hormone Levels on Patent Ductus Arteriosus Closure in Newborns"

Yorum "Yenidoğanlarda Tiroid Hormon Düzeylerinin Patent Ductus Arteriosus Kapanması Üzerine Etkisi"

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**Keywords:** Thyroid hormone levels, patent ductus arteriosus, newborns **Anahtar kelimeler:** Tiroid hormon düzeyleri, patent duktus arteriozus, yenidoğanlar

#### Dear Editor,

We read an interesting article by Kaya et al.<sup>1</sup> on the influences of thyroid hormone levels on the closure of patent ductus arteriosus (PDA) in Turkish newborns. Kaya et al.<sup>1</sup> found that mode of delivery, birth weight, and gestational week were the same between the surgical and medical treatment groups (p>0.05). However, free thyroxine levels were significantly lower in the medical treatment group than in the surgical treatment group (p=0.01). As a result, Kaya et al.<sup>1</sup> hypothesized that thyroid hormone levels might contribute to the closure of hemodynamically significant PDA. In addition to the few study limitations mentioned by Kaya et al<sup>1</sup>, we present the following points. The assessment of thyroid gland health status in children is determined by measuring and interpreting thyroid hormone profiles (THP). Because these profiles are controlled by various factors such as age, gender, ethnicity, dietary iodine intake, and socioeconomic standards<sup>2</sup>, numerous neonatal population-specific THPs have been created<sup>3,4</sup>. Turkey interestingly set neonatal THP in 2017 for clinical practice and research<sup>5</sup>. In the study methodology, Kaya et al.<sup>1</sup> didn't address regretfully which neonatal THPs were used to assess thyroid gland function. This methodological

limitation may further erode the accuracy of the study results introduced by Kaya et al.<sup>1</sup>.

### Ethics

Peer-review: Internally peer-reviewed.

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