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## Malignancy Rates in Thyroid Nodules Classified as Benign According to the Nodule Size Threshold of 4 cm

### Nodül Boyutu 4 cm. Üzerinde Benign Olarak Sınıflandırılan Tiroid Nodüllerinde Malignite Oranları

Mustafa Can ŞENOYMAK 

Sağlık Bilimleri Üniversitesi Sultan Abdülhamid Eğitim ve Araştırma Hastanesi  
Endokrinoloji ve Metabolizma Hastalıkları Kliniği, İstanbul, Türkiye

I have read with great interest the research article by Aydoğdu et al., titled “Malignancy Rates in Thyroid Nodules Classified as Benign According to the Nodule Size Threshold of 4 cm” published in the first issue of Balıkesir Medical Journal in 2024 (Aydoğdu et al., 2024). I would like to extend my appreciation to the authors and the editorial team for their significant contribution. In this letter, I aim to highlight specific aspects that I believe will enrich the ongoing discussion surrounding the article.

Contemporary medicine grapples with the management of patients presenting with thyroid nodules exceeding 4 cm, a topic that remains highly debated. While some advocate for surgical intervention in such cases, an increasing number of proponents, supported by studies like the one by Aydoğdu et al., suggest that benign results from preoperative fine-needle aspiration (FNA) may warrant surveillance instead (Aydoğdu et al., 2024; Haugen, et al., 2016). Inconsistent clinical guidelines for managing larger nodules can lead to unnecessary surgeries, increased costs, and heightened patient morbidity. The 2015 American Thyroid Association (ATA) Management guidelines state that cytologically benign nodules require no further diagnosis or treatment. However, uncertainties persist regarding whether the risk of malignancy differs significantly from smaller nodules in cases where the nodule exceeds 4 cm with benign cytology (Haugen, et al., 2016). Larger nodules exhibit a higher false-negative rate in FNAB, and are associated with increased risks of metastasis and poorer prognoses in malignant cases (Aydoğdu et al., 2024; Haugen, et al., 2016). However, I wish to address a concern regarding the methodology of the study.

Upon detailed review of the FNAB technique recommended in studies, particularly for large nodules, it is advised to sample from every area of the nodule with a minimum of three passes (Redman et al., 2006; Ha et al., 2018).

This approach aims to ensure that all potentially malignant areas within expansive nodules, where benign and malignant regions can coexist, are adequately sampled, thereby reducing false-negative results. However, the study does not specify whether a fixed number of passes per nodule, or additional passes for nodules larger than 4 cm, were performed during biopsies. Variations in the number of passes in large nodules could potentially influence benign or malignant outcomes. Furthermore, cytology results, such as benign (Bethesda 2) or indeterminate (Bethesda 3 and 4), can vary due to interobserver variability. Standardizing the technique (needle size and number of passes) and ensuring that results are interpreted by a consistent cytopathologist could enhance consistency and objectivity across interpretations, thereby further increasing the scientific rigor and clinical relevance of the findings.

In conclusion, I would like to express my sincere gratitude to Aydoğdu et al. for their invaluable contribution to the ongoing discussion on the management of large thyroid nodules. This research addresses a significant gap in our understanding and provides critical insights that may guide clinical decision-making and improve patient outcomes. I believe the additional points I have raised will enrich the study further and foster continued discourse on this important topic.

**Corresponding Author:** Mustafa Can Şenoymak **e-mail:** senoymak@gmail.com

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