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TABLE OF CONTENTS

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LETTER TO THE EDITOR

Remarks on the Correlation between the EU-TIRADS Score and the Definitive Histology of Thyroid Nodules Operated on in Lomé

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Thyroidology is a dynamic discipline that deals with the disorders and therapeutic options of the delicate butterfly gland, the thyroid, which may require a graceful approach.[1-4] We read a great deal of the article entitled "Correlation between the EU-TIRADS score and the definitive histology of thyroid nodules operated on in Lomé".[5] This study aimed to evaluate the diagnostic performance of the European Thyroid Imaging Reporting and Data System (EU-TIRADS) ultrasound score in the evaluation of thyroid nodules, a common diagnostic problem in resource-limited countries. A total of 134 medical records were collected for the study, and the average age was 42.28 ± 12.93 years, and 94% were women. The frequency of thyroid cancer was 8.96%, with papillary carcinoma being the predominant type, accounting for 91.6% of the cancers. On the sonographic evaluation, the distribution of nodules was exhibiting: 24 nodules (18%) were classified EU-TIRADS 2, while 72 (54%) EU-TIRADS 3, 19 (14%) EU-TIRADS 4, and 19 (14%) EU-TIRADS 5. We believe that this study provides essential data on the utility of the EU-TIRADS classification in a sub-Saharan African context and could contribute to the adaptation of existing algorithms for the management of thyroid nodules in contexts where cytological examination is not a common practice. As such, the strengths of the article are: i) The study focuses on a standard diagnostic problem in resource-limited countries: thyroid nodules; ii) It evaluates the diagnostic performance of the EU-TIRADS, a standardized diagnostic tool; iii) The study calculated and presented the key diagnostic performance metrics for EU-TIRADS, such as sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV), and accuracy; iv) This allows for a quantitative evaluation of the system's usefulness; v) The results are compared to existing literature; vi) The discussion section clearly compares the study's results with those of other studies conducted in different geographical locations; and vii) The conclusion emphasizes that the EU-TIRADS score could be a good tool for recognizing benign nodules, particularly in contexts where cytological examination is limited. It is still imperative and inevitable in order to carry out the cytopathologic examination of each indicated and suspected thyroid nodule. Nonetheless, the flaws of the study are: i) The study has a retrospective design; ii) It introduces inherent limitations such as the potential for bias in data collection and the possibility of missing information; iii) The variability of ultrasound equipment and its interpretation could be a limitation; iv) The fact that the ultrasounds were performed in different centers by different radiologists could have led to variability in image acquisition and the EU-TIRADS classification; v) The adaptation of the French TIRADS system to EU-TIRADS could also introduce bias; vi) The relatively small sample size for malignant cases might be a weakness; vii) Although 134 medical records were analyzed, the number of malignant cases is relatively small; viii) It

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Abbreviations - EU-TIRADS: European Thyroid Imaging Reporting and Data System; **PPV:** positive predictive value; **NPV:** negative predictive value.

could limit the statistical power of some analyses, particularly within the specific EU-TIRADS categories. ix) The lower malignancy rate in the high EU-TIRADS categories compared to some literature data is a contradiction; x) The malignancy rate found for the EU-TIRADS 5 in this study (36.8%) is lower than that reported in some other publications; xi) The PPV of the study is low (21.05%), which means that a positive EU-TIRADS result suggesting malignancy has a relatively low probability of actually being malignant; xii) the study is geographically limited to a single center (Lomé, Togo); and xiii) The outcomes may not be directly generalizable to other resource-limited settings or to populations with different prevalence rates of thyroid diseases or different access to healthcare. This issue merits further investigation. We thank Foma *et al*.[5] for their valuable study on EU-TIRADS in Thyroidology. Bene diagnoscitur bene curatur.

Conflicts of interest

The authors declare there are no conflicts of interest. Funding: None declared.

Keywords: Thyroid gland; Guideline; Pathology, Thyroidology, Thyroidologists

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