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ABDOMINAL IMAGING

LETTER TO THE EDITOR

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Letter to the Editor: "Transperineal ultrasonography with a high-frequency probe and a three-dimensional end-fire probe for imaging perianal abscesses and locating the internal openings of anal fistulas"

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Dear Editor,

We read with great interest the article by Wu et al.[1] entitled "Transperineal ultrasonography with a high-frequency probe and a three-dimensional end-fire probe for imaging perianal abscesses and locating the internal openings of anal fistulas," published in Diagnostic and Interventional Radiology. We congratulate the authors on addressing a clinically relevant question regarding a non-invasive imaging alternative for perianal fistulas and abscesses, particularly in resource-limited settings. However, we believe that two methodological issues-neither of which is acknowledged in the Limitations section-warrant consideration.

First, an apparent inconsistency exists between the stated blinding of surgeons and the attribution of improved clinical outcomes to the combined ultrasonography protocol. The authors explicitly state that "ultrasonographic findings, including the predicted locations of internal openings, were not disclosed to the operating surgeons prior to surgery." If surgeons were truly blinded to both group allocation and ultrasonographic findings, the causal interpretation of differences in surgical duration, intraoperative blood loss, postoperative pain, and wound healing as being due to improved preoperative imaging guidance is not straightforward. This potential inconsistency should be acknowledged, and the secondary outcomes should be interpreted with caution. The STARD 2015 guidelines emphasize complete reporting of blinding procedures, particularly for tests requiring subjective interpretation.[2]

Second, the sample size calculation may be inappropriate. The authors state that "sample size estimation was performed for a two-sample comparison of mean diagnostic accuracy, with accuracy treated as a continuous variable." However, diagnostic accuracy is a proportion; sample size estimation should be based on binomial assumptions for sensitivity and specificity.[3] This may have led to an underpowered study or imprecise estimates. However, we do not suggest that this invalidates the entire study; rather, it warrants cautious interpretation of the findings.

In conclusion, while we commend the authors for their efforts to develop a practical imaging alternative for perianal fistulas, the two methodological issues outlined above suggest that the findings should be interpreted with caution. Future research should ensure rigorous blinding procedures and statistically appropriate sample size estimation.

Footnotes

Conflict of interest disclosure

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References

1. Wu H, Chang J, Zhang X, Tao Y. Transperineal ultrasonography with a high-frequency probe and a three-dimensional end-fire probe for imaging perianal abscesses and locating the internal openings of anal fistulas. *Diagn Interv Radiol.* 2026;32(5):662-668. [Crossref]
2. Cohen JF, Korevaar DA, Altman DG, et al. STARD 2015 guidelines for reporting diagnostic accuracy studies: explanation and elaboration. *BMJ Open.* 2016;6(11):e012799. [Crossref]
3. Monti CB, Ambrogi F, Sardanelli F. Sample size calculation for data reliability and diagnostic performance: a go-to review. *Eur Radiol Exp.* 2024;8(1):79. [Crossref]