EDITORIAL

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Seeing the endometrium: time to move beyond blind sampling

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Abnormal uterine bleeding including postmenopausal bleeding remain among the most common reasons for referral to gynaecological services worldwide. For decades, the first-line investigation for assessing the uterus has been transvaginal ultrasonography (TVS). However, TVS is limited when it comes to evaluating the endometrium, being restricted to evaluation of its thickness and regularity. Blind endometrial tissue sampling, using traditional dilation and curettage or a Pipelle®-type aspiration devices, has been the next step. This sequential approach has become embedded in clinical practice because blind sampling is simple, inexpensive, and can often be performed in an outpatient setting. Yet this strategy has always rested on a fundamental limitation, namely, tissue is sampled without actually seeing the pathology. The advent of hysteroscopy has not only allowed visualisation within the uterine cavity but also facilitated targeted endometrial biopsy with the potential to improve diagnostic performance.

Previous systematic quantitative reviews have shown the individual accuracy of TVS,[1] endometrial biopsy[2,3] and hysteroscopy.[4] However, the added value of visually directed biopsy has not been so well evaluated. In this issue of FVV Gyn we publish a joint Society Practice Guideline from the American Association of Gynecologic Laparoscopists (AAGL), the European Society for Gynaecological Endoscopy (ESGE), and the Global Community of Hysteroscopy (GCH) attempts to address this deficiency.[5]

The guideline asks the question as to whether visually directed hysteroscopic biopsy should be favoured over blind endometrial sampling. The answer offered by the guideline is clear. Across the available comparative evidence, hysteroscopy with visually directed biopsy demonstrates superior diagnostic performance for endometrial hyperplasia, endometrial intraepithelial neoplasia (EIN), endometrial cancer, polyps, and submucosal fibroids, and should be incorporated into diagnostic algorithms whenever feasible.

Blind endometrial biopsy performs reasonably well for diffuse endometrial disease, particularly when a substantial proportion of the cavity is affected. However, many clinically important lesions are focal. Endometrial polyps, submucosal leiomyomas, localised EIN, and early endometrial cancer may occupy only a small area of the uterine cavity. It should therefore surprise no one that a blind instrument passed through the endometrial cavity may miss these lesions, sample

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adjacent normal tissue, or yield insufficient material for histological interpretation. The guideline shows that blind biopsy frequently demonstrates lower sensitivity for focal pathology, whereas hysteroscopy allows direct visualisation, targeted biopsy, and confirmation that the suspicious lesion has actually been sampled, thereby improving both detection and exclusion of disease.[5]

Beyond enhancing the diagnostic performance of endometrial biopsy, hysteroscopy allows concomitant treatment such as a polypectomy, myomectomy, retained pregnancy tissue (RPT) removal and adhesiolysis. Moreover, future treatment appropriate for an operating theatre setting can be planned; for example, a submucosal fibroid can be characterised and classified, allowing for better patient counselling, as well as informing decisions for endometrial preparation and selection of the best surgical technologies. Treatment of congenital uterine anomalies, dense adhesions, adherent RPT and cervical niches can similarly be better planned, potentially improving feasibility, efficiency and clinical outcomes. This convergence of diagnosis and treatment has become increasingly important as healthcare systems seek to reduce unnecessary procedures, minimise hospital admissions, and improve patient experience.[6] The traditional pathway of TVS followed by blind endometrial biopsy and subsequent diagnostic hysteroscopy for ongoing symptoms or equivocal earlier results and eventual operative hysteroscopy in an operating room setting (level 3a to level 5 pain control),[7] exposes patients to multiple appointments, repeated instrumentation, and prolonged uncertainty. A visually directed outpatient, hysteroscopic biopsy in women who screen positive on TVS has the potential to shorten that journey substantially. However, the acceptability of this approach to patients and its cost effectiveness needs further evaluation.

The guideline supports the view that hysteroscopy is not simply an alternative to endometrial biopsy, but as the optimal method of obtaining endometrial tissue. This distinction matters. Previous guidelines have often reserved hysteroscopy for women with abnormal imaging, persistent bleeding, or non-diagnostic biopsy results. Such recommendations implicitly treat blind sampling as the default and hysteroscopy as a second-line investigation. The present guideline argues instead that once the decision has been made to obtain tissue, hysteroscopic evaluation with directed biopsy should generally be preferred. In doing so, it aligns with an emerging international consensus that blind sampling should be minimised where hysteroscopic expertise and facilities are available.[7,8]

Whilst the authors should be commended for undertaking a high quality, systematic review with international involvement in keeping with recommended methodologies,[9] only four comparative studies met the predefined inclusion criteria, and several had important methodological weaknesses, including lack of blinding of those assessing the reference standard from the test result and heterogeneous reference standards. The quality of evidence supporting many recommendations was judged as only low to moderate which restricts the strength of clinical recommendations. Despite this limitation, contemporary outpatient hysteroscopy using small-diameter hysteroscopes, vaginoscopic techniques, improved optics, and dedicated biopsy instruments has made hysteroscopy more accessible, well tolerated, convenient, feasible and cost-effective.

The future research agenda outlined by the guideline published in this issue of Facts, Views and Vision in ObGyn[5] deserves equal attention. High-quality prospective, diagnostic accuracy studies, conducted according to recommended methodologies (https://www.equator-network.org/reporting-guidelines/stard/) comparing modern outpatient hysteroscopy with contemporary blind sampling techniques are needed, as gauged by the dearth of such studies identified in the systematic review informing this guideline. Integrating clinical data (i.e., patient characteristics)[10] will enhance accuracy and even more exciting is the prospect of integrating hysteroscopic visualisation and directed biopsy with digital imaging, artificial intelligence-assisted lesion recognition, and molecular diagnostics.

The endometrial cavity has remained one of the few anatomical spaces where blind sampling continues to occupy a central role despite the availability of direct endoscopic assessment. The evidence assembled by AAGL, ESGE, and GCH suggests that this historical exception is becoming increasingly difficult to defend. The era of blindly sampling an unseen endometrium is drawing to a close, and this guideline provides the clearest roadmap yet for what should replace it.

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References

1. Gupta JK, Chien PF, Voit D, Clark TJ, Khan KS. Ultrasonographic endometrial thickness for diagnosing endometrial pathology in women with postmenopausal bleeding: a meta-analysis. Acta Obstet Gynecol Scand. 2002;81:799-816.
2. Clark TJ, Mann CH, Shah N, Khan KS, Song F, Gupta JK. Accuracy of outpatient endometrial biopsy in the diagnosis of endometrial cancer: a systematic quantitative review. BJOG. 2002;109:313-21.
3. Clark TJ, Mann CH, Shah N, Khan KS, Song F, Gupta JK. Accuracy of outpatient endometrial biopsy in the diagnosis of endometrial hyperplasia. Acta Obstet Gynecol Scand. 2001;80:784-93.
4. Clark TJ, Voit D, Gupta JK, Hyde C, Song F, Khan KS. Accuracy of hysteroscopy in the diagnosis of endometrial cancer and hyperplasia: a systematic quantitative review. JAMA. 2002;288:1610-21.
5. International Hysteroscopy Working Group of ESGE, ESHRE and IFFS; Catena U, Grimbizis G, Arena A, Campo R, De Angelis C, et al. Structured reporting of diagnostic hysteroscopy findings in women with reproductive disorders: an ESGE–ESHRE–IFFS International Consensus. Facts Views Vis Obgyn. 2026;18:250-60.
6. De Silva PM, Smith PP, Cooper NAM, Clark TJ; Royal College of Obstetricians and Gynaecologists. Outpatient hysteroscopy: (Green-top Guideline no. 59). BJOG. 2024;131:e86-110.
7. Carugno J, Grimbizis G, Franchini M, Alonso L, Bradley L, Campo R, et al. International Consensus Statement for recommended terminology describing hysteroscopic procedures. Facts Views Vis Obgyn. 2021;13:287-94.
8. Clark TJ. Hysteroscopy is needed in the diagnostic workup of postmenopausal bleeding. BJOG. 2017;124:241.
9. Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, et al. The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. Int J Surg. 2021;88:105906.
10. Cooper NA, Barton PM, Breijer M, Caffrey O, Opmeer BC, Timmermans A, et al. Cost-effectiveness of diagnostic strategies for the management of abnormal uterine bleeding (heavy menstrual bleeding and post-menopausal bleeding): a decision analysis. Health Technol Assess. 2014;18:1-201, v-vi.