"Blind" endometrial sampling: A call to end the practice

ObGyns need to embrace the now years-long availability of office hysteroscopy, resisting the performance of dilation and curettage procedures, so that patients' conditions can be appropriately determined with proper surgical procedures and follow-up, says this expert

Q&A with Linda D. Bradley, MD

BG MANAGEMENT Board Member Linda Bradley, MD, recently attended the Global Congress on Hysteroscopy in Malaga, Spain, May 26-27, 2022, organized by the Global Community on Hysteroscopy, and co-authored the article, "Implementation of office hysteroscopy for the evaluation and treatment of intrauterine pathology" in Obstetrics and Gynecology.1 She is the Director of the Center for Menstrual Disorders, Fibroids and Hysteroscopic Services at Cleveland Clinic in Cleveland, Ohio. OBG MANAGEMENT recently caught up with her to ask about her perspectives on the expanded use of hysteroscopy in obstetrics and gynecology, and her call to "end blind endometrial sampling."



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OBG MANAGEMENT: What are the drawbacks of dilation and curettage?

Linda Bradley, MD: The standard in ObGyn for many years has been our reliance on the blind dilation and curettage (D&C)—it has been the mainstay for evaluation of the endometrial cavity. We know that it has risks, but most importantly, the procedure has low sensitivity for detecting focal pathology. This basic lack of confirmation of lesions makes a diagnosis impossible and patients are challenged in getting adequate treatment, and will not, since they may not know what options they have for the treatment of intrauterine pathology.

Because it is a "blind procedure," done without looking, we don't know the endpoints, such as when is the procedure completed, how do we know we removed all of the lesions? Let's look at our colleagues, like GI and colorectal physicians. If a patient presents with rectal bleeding, we would perform an exam, followed by either a colonoscopy or sigmoidoscopy. If a patient were vomiting up blood, a gastroenterologist would perform an upper endoscopy, look with a tube to see if there is an ulcer or something else as a source of the bleeding. If a patient were bleeding from the bladder, a urologist would use a cystoscope for direct inspection.

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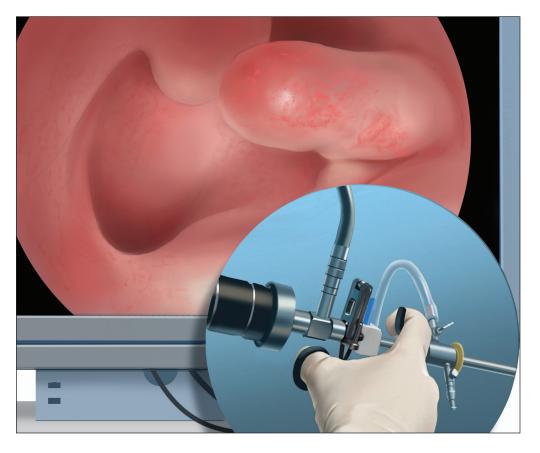
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Unfortunately for gynecologists, only about 15% to 25% of us will use hysteroscopy as a diagnostic method2-a method that has excellent sensitivity in detecting endocervical disease, intrauterine disease, and proximal tubal pathology. Compared with blind curettage, we can visualize the cavity; we can sample the cavity directly; we can determine what the patient has and determine the proper surgical procedure, medical therapy, or reassurance that a patient may be offered. We often are looking at focal lesions, lesions in the uterine cavity that could be cancer, so we can make a diagnosis. Or we may be looking at small things, like endometrial hyperplasia, endocervical or endometrial polyps, retained products of conception, or fibroids. We can look at uterine pathology as well as anatomic issues and malformations-such as bicornuate or septate uterus.

I actually say, "My hysteroscope is my stethoscope" because it allows us to evaluate for many things. The beauty of the new office hysteroscopes is that they are miniaturized. Doctors now have the ability to use reusable devices that are as small as 3 millimeters. There are disposable ones that are up to 3.5 to 4 millimeters in size. Gynecologists have the options to choose from reusuable rigid or flexible hysteroscopes or completely disposable devices. So, truly, we now should not have an excuse for evaluating a woman's anatomy, especially for bleeding. We should no longer rely, as we have for the last century or more, just on blind sampling, because we miss focal lesions.

OBG MANAGEMENT: When was the hysteroscope first introduced into the field?

Dr. Bradley: The technology employed in hysteroscopy has been around really since the last 150+ years, introduced by Dr. Pantaleoni. We just have not embraced its usefulness in our clinical practice for many years. Today, about 15% to 25% of gynecologists practicing in the United States are performing hysteroscopy in the office.¹

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TABLE Hysteroscopy indications4

Polypectomy and myomectomy

- · Abnormal uterine bleeding
- Infertility
- · Recurrent pregnancy loss
- · Retained products of conception

Contraindications

- Viable intrauterine pregnancy
- · Active reproductive tract infection (pelvic inflammatory disease or active or prodromal herpes infection)
- Known cervical cancer

OBG MANAGEMENT: How does using hysteroscopy contribute to better patient outcomes?

Dr. Bradley: We can get a more accurate diagnosis-fewer false-negatives and a high degree of sensitivity in detecting focal lesions. With D&C, much focal pathology can be left behind. In a 2001 study, 105 symptomatic postmenopausal women with bleeding and thickened lining of the uterus greater than 5 mm on ultrasound underwent blind D&C. They found that 80% of the women had intracavitary lesions and 90% had focal lesions. In fact, 87% of the patients with focal lesions still had residual pathology after the blind D&C.3 The D&C procedure missed 58% of polyps, 50% of endometrial hyperplasia, 60% of cases of complex atypical hyperplasia, and even 11% of endometrial cancers. So these numbers are just not very good. Direct inspection of the uterus, with uninterrupted visualization through hysteroscopy, with removal of lesions under direct visualization, should be our goal.

Blind sampling also poses greater risk for things like perforation. In addition, you not only can miss lesions by just scraping the endometrium, D&C also can leave lesions just floating around in the uterine cavity, with those lesions never retrieved. With office hysteroscopy, the physician can be more successful in treating a condition because once you see what is going on in the uterine cavity, you can say, "Okay, I can fix this with a surgical

procedure. What instruments do I need? How much time is it going to take? Is this a straightforward case? Is it more complicated? Do I let an intern do the case? Is this for a more senior resident or fellow?" So I think it helps to direct the next steps for surgical management and even medical management, which also could be what we call "one-stop shopping." For instance, for directed biopsies for removal of small polyps, for patients that can tolerate the procedure a little longer, the diagnostic hysteroscopy then becomes a management, an operative procedure, that really, for myself, can be done in the office. Removal of larger fibroids, because of fluid management and other concerns, would not be done in the office. Most patients tolerate office procedures, but it also depends on a patient's weight, and her ability to relax during the procedure.

The ultimate goal for hysteroscopy is a minimum of diagnosis, meaning in less than 2, 3 minutes, you can look inside the uterus. Our devices are 3 millimeters in size; I tell my patients, it's the size of "a piece of spaghetti or pasta," and we will just take a look. If we see a polyp, okay, if your office is not equipped, because then you need a different type of equipment for removal, then take her to the operating room. The patient would be under brief anesthesia and go home an hour or 2 later. So really, for physicians, we just need to embrace the technology to make a diagnosis, just look, and then from there decide what is next.

OBG MANAGEMENT: What techniques do you use to minimize or eliminate patient discomfort during hysteroscopy?

Dr. Bradley: I think first is always be patientcentric. Let patients be prepared for the procedure. We have reading materials; our nurses explain the procedure. In the office, I try to prepare the patient for success. I let her know what is going on. A friend, family member can be with her. We have a nurse that understands the procedure; she explains it well. We have a type of bed that allows the patients' legs to rest more comfortably in the stirrups—a leg rest kind of stirrup. We use a heating pad. Some

FAST TRACK

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patients like to hear music. Some patients like to have aromatherapy. We are quick and efficient, and typically just talk to the patient throughout the procedure. Although some patients don't like this explanatory, "talkative" approach—they say, "Dr. Bradley, just do the procedure. I don't want to know you are touching the cervix. I don't want to know that you're prepping. Just do it."

But I like what we called it when I was growing up: vocal-local (talk to your patient and explain as you proceed). It's like local anesthesia. For these procedures in the office you usually do not have to use numbing medicine or a paracervical block. Look at the patient's age, number of years in menopause, whether or not she has delivered vaginally, and what her cervix looks like. Does she have a sexually transmitted infection or pelvic inflammatory disease? Sometimes we will use misoprostol, my personal preference is oral, but there are data to suggest that vaginal can be of help.4 We suggest Motrin, Tylenol an hour or 2 before, and we always want patients to not come in on an empty stomach. There is also the option of primrose oil, a supplement, that patients buy at the drug store in the vitamin section. It's used for cervical softening. It is taken orally.5-7

If they want, patients can watch a video—similar to watching childbirth videos when I used to deliver babies. At some point we started putting mirrors where women could see their efforts of pushing a baby out, as it might give them more willpower to push harder. Some people don't want to look. But the majority of women will do well in this setting. I do have a small number of women that just say, "I can't do this in the office," and so in those cases, they can go to the operating room. But the main idea is, even in an operating room, you are not just doing a D&C. You are still going to look inside with a hysteroscope and have a great panoramic view of what is going on, and remove a lesion with an instrument while you watch. Not a process of looking with the hysteroscope, scraping with a curettage, and thinking that you are complete. Targeted removal of focal lesions under continuous visualization is the goal.

When to schedule hysteroscopy procedures and how to prepare the endometrium

To maximize visualization and procedure ease, schedule office hysteroscopy shortly after menstruation for reproductive-age women with regular menstrual cycles, which corresponds to timing of the thinnest endometrial lining.1 By contrast, the luteal phase of the menstrual cycle may be associated with the presence of secretory endometrium, which may mimic endometrial polyps or obscure intrauterine pathology, including FIGO type 1 and 2 submucous leiomyomas.

The following patients can have their procedures scheduled at any time, as they do not regularly cycle:

- those receiving continuous hormonal contraception
- women taking menopausal hormonal therapy
- · women on progestin therapy (including those using intrauterine devices).

For patients with irregular cycles, timing is crucial as the topography of the endometrium can be variable. To increase successful visualization and diagnostic accuracy, a short course of combined hormonal contraceptives² or progestin therapy^{3,4} can be considered for 10-14 days, followed by a withdrawal menses, and immediate procedure scheduling after bleeding subsides, as this will produce a thin endometrium. This approach may be especially beneficial for operative procedures such as polypectomy in order to promote complete specimen extraction.

Pharmacologic endometrial preparation also is an option and has been associated with decreased procedure time and improved patient and clinician satisfaction during operative hysteroscopy.^{2,3} We discourage the use of hormonal pre-treatment for diagnostic hysteroscopy alone, as this may alter endometrial histology and provide misleading results. Overall, data related to pharmacologic endometrial preparation are limited to small studies with varying treatment protocols, and an optimal regimen has vet to be determined.

References

- 1. The use of hysteroscopy for the diagnosis and treatment of intrauterine pathology: ACOG Committee Opinion, number 800. Obstet Gynecol. 2020;135:e138-e148. doi:10.1097/AOG.0000000000003712.
- 2. Cicinelli E, Pinto V, Quattromini P, et al. Endometrial preparation with estradiol plus dienogest (Qlaira) for office hysteroscopic polypectomy: randomized pilot study. J Minim Invasive Gynecol. 2012;19:356-359. doi:10.1016/j.jmig.2011.12.020.
- Laganà AS, Vitale SG, Muscia V, et al. Endometrial preparation with dienogest before hysteroscopic surgery: a systematic review. Arch Gynecol Obstet. 2017;295:661-667. doi:10.1007/s00404-016-4244-1.
- Ciebiera M, Zgliczy ska M, Zgliczy ski S, et al. Oral desogestrel as endometrial preparation before operative hysteroscopy: a systematic review. Gynecol Obstet Invest. 2021;86:209-217. doi:10.1159/000514584.

OBG MANAGEMENT: Can you describe the goals of the consensus document on ending blind sampling co-created by the European Society of Gynecologic Endoscopy, AAGL, and the Global Community on Hysteroscopy?

Dr. Bradley: Our goal for this year is to get a systematic review and guidelines paper written that speaks to what we have just talked about. We want to have as many articles about why blind sampling is not beneficial, with too many misses, and now we have new technology available. We want to speak to physicians to solve the conundrum of bleeding, with equivocal ultrasounds, equivocal saline infusion, sonograms, equivocal MRIs—be able to take a look. Let's come up to speed like our other colleagues in other specialties that "look." A systematic review guideline document will provide the evidence that blind D&C is fraught with problems and how often we miss disease and its inherent risk.

We need to, by itself, for most of our patients, abandon D&C because we have too many missed diagnoses. As doctors we have to be lifelong learners. There was no robot back in the day. We were not able to do laparoscopic hysterectomies, there were no MRIs. I remember in our city, there was one CT scan. We just did not have a lot of technology. The half-life of medical knowledge used to be decades—you graduated in the '60s, you could be a great gynecologist for the next 30 years because there was not that much going on. When I finished in the mid to late '80s, there was no hysteroscopy training. But I have come to see its value, the science

So what I say to doctors is, "We learn so many new things, we shouldn't get stuck in just saying, 'I didn't do this when I was in training." And if your thought is, "Oh, in my practice, I don't have that many cases," you still need to be able to know who in your community can be a resource to your patients. As Maya Angelou says, "When you know better, you should do better." And that's where I am now—to be a lifelong learner, and just do it.

Lastly, patient influence is very important. If patients ask, "How are you going to do the procedure?" it's a driver for change. By utilizing hysteroscopy in the evaluation of the intrauterine cavity, we have the opportunity to change the face of evaluation and treatment for abnormal uterine bleeding.

References

- Orlando MS, Bradley LD. Implementation of office hysteroscopy for the evaluation and treatment of intrauterine pathology. Obstet Gynecol. August 3, 2022. doi: 10.1097/ AOG.0000000000004898.
- 2. Salazar CA, Isaacson KB. Office operative hysteroscopy: an update. J Minim Invasive Gynecol. 2018;25:199-208.
- Epstein E, Ramirez A, Skoog L, et al. Dilatation and curettage fails to detect most focal lesions in the uterine cavity in women with postmenopausal bleeding. Acta Obstet Gynecol Scand. 2001:80:1131-1136. doi:10.1034/i.1600-0412.2001.801210.x.
- The use of hysteroscopy for the diagnosis and treatment of intrauterine pathology: ACOG Committee Opinion, number 800. Obstet Gynecol. 2020;135:e138-e148. doi:10.1097/

- AOG 0000000000003712
- Vahdat M, Tahermanesh K, Mehdizadeh Kashi A, et al. Evening Primrose Oil effect on the ease of cervical ripening and dilatation before operative hysteroscopy. Thrita. 2015;4:7-10. doi:10.5812/thrita.29876
- Nouri B, Baghestani A, Pooransari P. Evening primrose versus misoprostol for cervical dilatation before gynecologic surgeries: a double-blind randomized clinical trial. J Obstet Gynecol Cancer Res. 2021;6:87-94. doi:10.30699/jogcr.6.2.87
- Verano RMA, Veloso-borromeo MG. The efficacy of evening primrose oil as a cervical ripening agent for gynecologic procedures: a single-blinded, randomized controlled trial. PJOG. 2015;39:24-28.