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Intrauterine Device Pain Management



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Improving Management of Pain
Associated With Intrauterine
Device Insertion

Expert Insights on Pain Management
With Intrauterine Device Insertion:
Q&A With **Sheila Mody, MD;** and
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Improving Management of Pain Associated With Intrauterine Device Insertion

In the United States, almost half (45%) of all pregnancies among adolescents and women aged 15 to 44 years from 2008 to 2011 were unplanned.¹ This percentage represents a decline from the last assessment by the National Center for Health Statistics in 2008. The decline likely was due to an overall increase in use of contraceptives—especially long-acting reversible contraceptives (LARCs) such as intrauterine devices (IUDs)—by adolescents and women at risk of unplanned pregnancy over this time period.¹ However, unintended pregnancies were more common among women with lower incomes and lower levels of education.¹ Some racial and ethnic disparities have narrowed in recent years, yet disadvantaged Black and Hispanic women have higher rates of unplanned pregnancies than do White women and those having higher incomes.¹

LARCs such as IUDs have greater rates of efficacy, length of continuation, and patient satisfaction than do short-acting contraceptives.² For contraception among sexually active young women and adolescents, the levonorgestrel-releasing intrauterine system (LNG-IUS) and the copper-containing IUD (Cu-IUD) are endorsed by the American College of Obstetricians and Gynecologists, the Society of Obstetricians and Gynecologists of Canada, and the European Society of Contraception and Reproductive Health.³ Their use is also supported by the North American Society for Pediatric and Adolescent Gynecology and the American Academy of Family Physicians.^{4,5} In addition to contraception, the LNG-IUS offers noncontraceptive benefits (eg, treatment for dysmenorrhea, endometriosis, or heavy menstrual bleeding).⁶

When properly used, the LNG-IUS and the Cu-IUD are associated with 0.2% and 0.6% failure rates overall, respectively, which are comparable to rates noted with tubal sterilization (0.5%).^{2,7} By contrast, oral contraceptives, which are used more frequently by young women and adolescents, are 20 times less effective than are IUDs.^{8,9}

Yet, despite their endorsements by professional societies and groups and records of safety and efficacy, IUDs continue to have a low uptake by adolescents and young women.^{3,5,8} Among US adolescents who used contraceptives between 2011 and 2015, only 2.8% used an IUD.² The underuse of IUDs may be attributed to anxiety related to IUD placement and fear of pain associated with the procedure.^{2,6}

PATIENT-REPORTED PAIN VERSUS PHYSICIAN-PERCEIVED PAIN

Physicians tend to underestimate patients' pain levels.¹⁰ Accurate pain assessment is critical for recognition, choice of the best analgesic, and determination of patient response to a particular analgesic method. Pain is often determined using either the numerical rating scale (with zero on a 10-cm scale indicating no pain and 10 representing the worst pain) or a visual analog scale (VAS).^{10,11} The VAS score is a validated standard instrument for assessing pain in clinical research; similar to the numerical rating scale, a score of zero indicates no pain and a score of 10 represents the worst pain imaginable.¹¹

Pain is naturally subjective and influenced by personal experience. Those factors alone make it difficult for someone

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IUD PAIN MANAGEMENT

to assess another person's pain; however, a physician's perception of patients' pain can be compounded by numerous additional factors, including professional experience, personality, communication style, and clinical environment.¹⁰ Survey results from 284 women showed that patients' pain level associated with IUD insertion was higher than that observed by their clinicians (**Figure**).¹² These results highlight the need to educate physicians about improving their assessment of and response to patients' pain.

With IUD insertion, most women experience a sensation similar to that of menstruation discomfort, but some experience moderate to severe pain.^{13,14} VAS pain scores on a 10-mm line related to IUD insertion have ranged from 2 to 7.¹⁵ This pain may be related to several aspects of the insertion process, including placement of the tenaculum (a type of forceps), use of the uterine sound, insertion of the IUD in the cervix, and contact with the uterine fundus.¹⁶

Women who have not given birth generally report considerably more pain with IUD insertion than do those who have borne children, although the procedure does not vary between these populations.^{2,12,17} Women with dysmenorrhea or anxiety may also experience greater pain.¹⁸ Additional aspects related to anatomy, psychology, and culture may also contribute to discomfort.¹⁹

The discrepancy between provider and patient perception can apply specifically to the pain associated with IUD insertion.^{10,12} Patients often do not receive pain management for the procedure; the decision to receive analgesia largely is based upon the preference of the provider and counseling given to the patient.¹⁵ Notably, patients have indicated willingness to undergo certain inconveniences (eg, applying topical pain therapies, extending visit time in the clinic) to better control pain.¹⁶

It is important for clinicians to be aware of the potential for pain, recognize that it is an

important issue for patients, and familiarize themselves with pain management options. This awareness may enable clinicians to optimally educate patients, support their relaxation and comfort with the procedure, and select appropriate pain management as needed.¹²

PAIN MANAGEMENT STRATEGIES FOR IUD INSERTION

Currently, there are no official guidelines or standards of care for managing pain associated with IUD insertion.¹⁶ Comparison of pain management strategies used in clinical studies may be challenging because of variations across patient groups, randomization procedures, types of IUDs used, pain assessment protocols, and analgesia approach. In addition, many women experience no or minimal pain without any pain management, which complicates understanding of how analgesia affects the patient experience.¹⁹

Results from a 2015 Cochrane review indicated that use of certain oral analgesics and forms of lidocaine helped to reduce pain during IUD insertion among some patient groups.²⁰ Authors of a 2019 literature review noted that findings from that Cochrane review primarily were culled from single, moderate-quality studies; the outcomes of the 2019 review similarly showed that use of various lidocaine preparations before IUD insertion was associated with clinically relevant positive effects on patients' experience of insertion pain. However, the authors stated that the routine use of lidocaine continues as a point of discussion.¹⁹

Oral analgesia

Over-the-counter (OTC) oral analgesia allows patients to take the medication before having the procedure and provides time savings and affordability. In this context, use of nonsteroidal anti-inflammatory drugs

(NSAIDs) has been studied the most.¹³ Ibuprofen has been used in randomized trials, but this common NSAID has not been associated with less IUD insertion pain.¹³ The NSAID ketorolac, by contrast, may offer overall pain relief. In 1 study, ketorolac, 20 mg, or placebo was given by mouth 40 or 60 minutes prior to IUD insertion.²¹ Patients who received ketorolac experienced improved pain reduction during the procedure, 10 minutes after the procedure, and overall when compared with the placebo group.²¹ The greatest analgesic effect obtained with oral ketorolac most likely occurs 1 to 2 hours following administration; therefore, this pain management strategy may not be applicable in outpatient settings. Use of oral ketorolac, 20 mg, for an IUD procedure may be feasible for eligible patients if it is prescribed with instructions to consume 1 hour before the appointment.²¹

Use of the NSAID naproxen sodium to manage the pain of IUD insertion has also been studied. Outcomes from a study regarding naproxen sodium, 550 mg, given by mouth 60 minutes before IUD insertion showed that use of this agent did not reduce pain during insertion. It did, however, result in less pain after the procedure.¹³ To support pain reduction following the procedure, clinicians could recommend that patients take two 220-mg naproxen sodium tablets (OTC strength) before their arrival. Clinics may also offer 550-mg tablets (prescription strength) on-site for patients who are not able to take the medication prior to the appointment.¹³

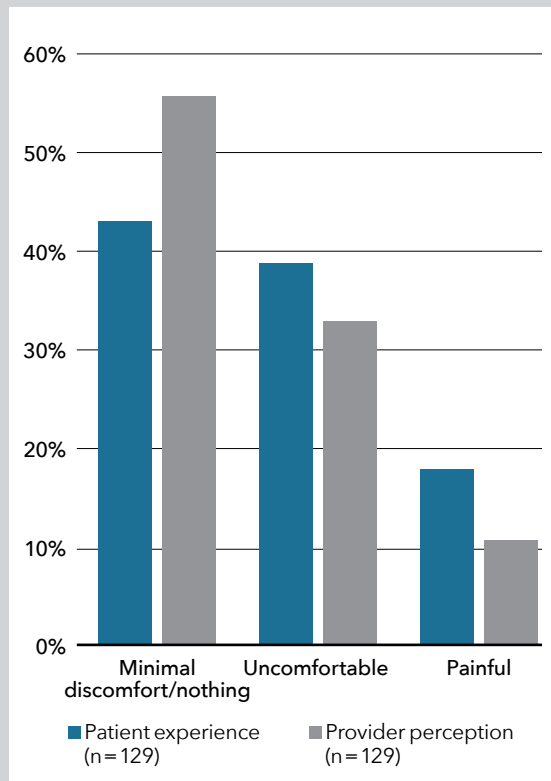
With consideration of these study outcomes, certain NSAIDs (ketorolac and naproxen sodium) may offer notable analgesic effects during and following the IUD procedure.^{13,21}

Local analgesia

Use of local analgesia involving lidocaine formulations delivered via paracervical blocks, creams, and self-administered gels has also been explored.^{8,16,22-24} The lidocaine gels, evaluated as preparations of 4 mL and 20 mL of 2% lidocaine in 2 studies, were self-administered vaginally at a median of 9 and 21 minutes, respectively, prior to procedure initiation. Compared with placebo, the vaginal gels did not appear to have an impact on pain associated with IUD insertion.^{16,22}

By contrast, an oil-in-water cream formulation containing a 1:1 lidocaine, 2.5%, and prilocaine, 2.5%, mixture (LP cream) showed promise as a pain relief strategy in a 3-armed, randomized controlled trial comparing LP cream with misoprostol (a cervical ripening agent) or placebo.²³ In

FIGURE. Clinicians Underestimate Patient Pain With IUD Procedure Among Nulliparous and Parous Women^{12,a}



^aOverall experience of procedure was scaled from 1 to 3 with 1 being painful, 2 being uncomfortable, and 3 being minimal or no discomfort.

the LP cream group, 2 mL of the cream was applied to the ectocervix and 3 mL applied to the endocervical canal 5 minutes before IUD insertion. In the misoprostol group, a misoprostol, 200 µg, vaginal tablet was administered 3 hours before IUD insertion. Significantly lower mean (SD) VAS pain scores on a 100-mm line for both LP cream versus placebo (2.1 [1.0] vs 3.7 [1.6], respectively; $P < .001$) and misoprostol vaginal tablets versus placebo (2.3 [1.3] vs 3.7 [1.6]; $P < .001$) were noted.²³ Pain control during IUD insertion with use of LP cream or misoprostol was comparable, yet use of LP cream was associated with significantly lower VAS pain scores (on a 100-mm line) at 10 minutes following the procedure compared with use of misoprostol.²³ Use of LP cream also was associated with greater ease of IUD insertion and higher patient satisfaction than was use of misoprostol or placebo.²³

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The researchers concluded that LP cream was an effective strategy for pain control and ease of IUD insertion and that use of a misoprostol, 200 µg, vaginal tablet was a viable alternative when LP cream is unavailable.²³

Use of paracervical blocks (lidocaine, 1%; 10 mL or 18 mL) has lessened pain associated with various steps of IUD insertion according to outcomes from 2 randomized clinical trials.^{8,24} A study evaluating the 10-mL lidocaine block involved women aged 14 to 22 years who were going to receive the 13.5-mg levonorgestrel IUD. These patients received the block 3 minutes prior to IUD insertion, with 1 mL of lidocaine, 1%, injected at the tenaculum site and 4.5 mL injected at 4 o'clock and 8 o'clock on the cervicovaginal junction.⁸ Another study evaluated an 18-mL lidocaine block in women aged 18 to 45 years; most were going to receive the levonorgestrel, 52-mg, IUD or the CuT380A IUD, both of which have larger applicator frames than that of the 13.5-mg levonorgestrel IUD and could influence pain experience. For the paracervical block, the 18 mL of lidocaine, 1%, was buffered with 2 mL of sodium bicarbonate, 8.4%. Patients received the 20-mL block directly before IUD insertion, with 2 mL injected at the tenaculum site and 9 mL injected at 4 o'clock and 8 o'clock on the vaginal fornices.²⁴

In both studies, the median VAS pain score (100-mm line) for IUD insertion was lower for women given the paracervical block than for those given no block (10-mL block, 30.0 vs 71.5 mm [$P < .001$]; 18-mL block, 33 vs 54 mm [$P = .002$]).^{8,24} Patients who received the 10-mL lidocaine block had a lower VAS pain score (100-mm line) for every procedural step from tenaculum placement through 5 minutes after removal of the speculum.⁸ Similarly, patients who received the 18-mL lidocaine block had lower median pain scores for uterine sounding through 5 minutes after IUD placement.²⁴ Of note, patients should be counseled before undergoing the procedure, as that the paracervical block itself can cause pain

(30 mm on a VAS pain scale [100-mm line]), although it has effectively reduced the overall level of pain experienced with the IUD procedure.²⁴

In summary, the findings from these studies were favorable regarding the use of certain lidocaine preparations as a local analgesic for controlling pain associated with IUD insertion.^{8,16,22-24}

Cervical priming agents

As mentioned in the review of an earlier study, misoprostol is typically used to ripen the cervix before labor induction and transcervical procedures.²³ However, according to a 2016 Centers for Disease Control and Prevention (CDC) review of studies, results of 7 of 10 trials evaluating misoprostol use in easing IUD insertion did not find a notable difference between the misoprostol and control groups. Furthermore, results from 2 trials with results favoring use of misoprostol over placebo either were confounded or showed that IUD insertions across all patients were without discomfort.²⁵

Despite these outcomes, the CDC concluded that outcomes of 1 randomized controlled trial showed promise for misoprostol use among women who initiated a second attempt at IUD insertion after an initial failed attempt.²⁵ Participants in the active group received misoprostol, 200 µg, vaginally either 10 hours or 4 hours before insertion; results were compared against those of a placebo group.²⁵ With the second insertion attempt, considerably more women given misoprostol experienced a successful insertion than did those given placebo (88% vs 62%, respectively).²⁵ The CDC noted that additional research should include focus on misoprostol use following an initial IUD insertion failure.²⁵

Overall, misoprostol has not demonstrated efficacy in reducing pain associated with IUD insertion; however, it may support insertion success among women who experienced a previous insertion failure.²⁴

Nitrous oxide and intrauterine analgesia

Administration of odorless and colorless nitrous oxide gas or intrauterine analgesia has been explored for IUD insertion pain; however, results are mixed, and neither strategy is widely available in the practice setting.^{6,11,15,26} Nitrous oxide has a strong safety profile and rapid metabolism, which allows patients to quickly assume normal activities after administration.⁶ One prospective observational study explored the effects of nitrous oxide versus standard of care on pain levels among adolescents following IUD placement.⁶ Nitrous oxide was administered via inhalation at a rate of 50/50 nitrous oxide/oxygen for 2 minutes prior to IUD insertion.⁶ Patient-reported pain results on a VAS pain score (100-mm line) demonstrated a lower pain experience and greater patient satisfaction with the procedure among those who used nitrous oxide than among those who received standard of care.⁶ Results of a 2016 study in which 50/50 nitrous oxide/oxygen was given for 2 minutes before the procedure, however, did not indicate pain reduction. Still, women who received the nitrous oxide reported greater satisfaction with their pain management than did those given placebo.²⁶

Results are also conflicting on the use of intrauterine analgesia. Results of 1 study showed that IUD procedure pain and patient satisfaction were not different among groups given 5 mL of lidocaine, 2%, in the intrauterine cavity; naproxen, 375 mg, by mouth; or placebo 1 hour prior to the procedure.¹⁵ However, outcomes from another study regarding 10 mL of mepivacaine, 1%, or placebo placed in the intrauterine cavity showed that the treatment group experienced moderately lower pain levels as indicated on the VAS pain scale (100-mm line), although pain reduction was less than the hypothesized effect size.¹¹

Overall, results are mixed on the use of nitrous oxide gas and intrauterine analgesia as pain control methods for IUD insertion.^{6,11,15,26} Furthermore, these approaches are not always available in the clinical setting and are used infrequently.

NONPHARMACOLOGIC MANAGEMENT

Nonpharmacologic options may be used for the IUD procedure with pharmacology-based pain management strategies or when pharmaceuticals are contraindicated or not available.²⁷

Complementary approaches

Many complementary approaches address stress and anxiety, which directly affect pain perception.²⁷ Deep, diaphragmatic

breathing and/or yoga-like physical movements performed before IUD insertion can help enhance relaxation and comfort.²⁷ Complementary therapies (eg, acupressure, aromatherapy, and soothing music) may also help reduce stress and/or pain associated with the procedure.²⁷ Heat packs, which are often used to relieve discomfort associated with dysmenorrhea, may serve a similar purpose with gynecologic procedures, including IUD placement.²⁷

Verbal analgesia

Verbal analgesia, in which a clinician uses low speech and a quiet tone of voice to calm the patient, also has demonstrated promise in research. In 1 study, verbal analgesia (consisting of verbal reinforcement offered during each step of the procedure with the clinician asking the patient to relax her body and reassuring that the procedure should not cause harm) was compared with use of tramadol hydrochloride, 50 mg, given orally 1 hour before IUD insertion. No notable differences between the 2 groups regarding overall pain level, ease of insertion, and number of insertion attempts were found.²⁸

Atraumatic forceps

Different forceps have also been investigated for associations with pain level during IUD insertion. The single-toothed tenaculum, which pierces the cervical epithelium, was believed to cause more pain and bleeding than relatively atraumatic forceps such as the Allis or Littlewood forceps.¹⁴ However, study findings demonstrated no significant pain difference between the 2 types of forceps at the time of forceps application or IUD insertion and 5 minutes following IUD insertion.¹⁴

Timing with menstrual cycle

The World Health Organization guidelines state that IUDs may be inserted at any time throughout the menstrual cycle. Placing an IUD during menstruation may offer greater ease of insertion and less pain, because the cervical ostium is dilated; moreover, it may result in less prolonged bleeding, because the endometrium is in the process of breaking down. The challenge involved is that women are less likely to want to receive the procedure during menstruation.²⁹ Furthermore, results from a randomized trial comparing the IUD insertion experience in women who were menstruating to those who were not menstruating showed no difference

between the groups regarding pain perception at time of insertion or bleeding pattern and patient satisfaction at 3 months.²⁹ The researchers concluded that the IUD could be inserted at any point throughout the menstrual cycle without compromising patient comfort or outcomes.²⁹

In conclusion, nonpharmacologic options—such as deep breathing, heat packs, or verbal analgesia—may help either to complement pharmacology-based pain management or to offer relief when pharmaceuticals are not used with the IUD procedure.^{27,28}

ACKNOWLEDGING THE PATIENT EXPERIENCE

The advent of social media platforms has offered patients valuable forums for sharing and receiving information regarding health care and the patient experience; with the expanding availability of mobile devices, these forums can be accessed by an ever-increasing majority of people.³⁰ Most Americans now use the internet to search for health-related information that may affect their medical decision-making.³⁰ Stories reflecting patient experience, particularly when they generate emotion from the viewer, can have a strong impact.³⁰ Overall, social media can amplify the more-extreme patient experiences.³⁰

Recently, social media trends regarding patient experience with IUD insertion were exposed.³¹⁻³³ Findings from an evaluation conducted by Duke University indicated that 39.8% of 100 top-liked videos tagged #IUD on the social media platform TikTok highlighted a negative user experience with IUDs. In addition, 96.8% of 31 videos regarding experience with IUD insertion or removal emphasized pain and IUD adverse effects, and approximately 25% indicated patient interest in receiving anesthesia during insertion.³³ Messages shared by patients via TikTok described the pain of insertion (eg, the “worst pain imaginable”) and questioned the lack of pain management options offered by the provider.³¹ This movement on social media highlights the need for providers to be aware of the patient experience, to address any discrepancy between provider and patient perception of pain, and to offer a viable pain management strategy for the IUD procedure.

CONCLUSIONS

IUD placement is associated with a high rate of efficacy, length of continuation, and patient satisfaction with insertion.² The high efficacy seen in clinical practice is supported by clinical trial outcomes.² However, anticipated

insertion pain may contribute to low use despite the availability of multiple ways to manage and address insertion pain.^{2,6} Various approaches to management of associated pain have been explored. Some strategies (eg, use of certain lidocaine formulations and delivery systems) have demonstrated efficacy, although no single standard treatment algorithm has been created or described.^{16,19}

There is an ongoing need to improve upon approaches for IUD insertion pain management.¹⁹ Health care providers tend to underestimate pain, and they need to recognize that the pain of IUD placement is a real barrier that must be addressed openly and effectively.¹² Determining each patient’s potential pain threshold and susceptibility to discomfort may help guide an individualized analgesic plan.^{18,19} Thoughtful conversations can increase patient comfort when they receive an IUD. Improved pain management may also allow the provider to insert the device more smoothly and quickly, and it may help patients feel greater satisfaction with the procedure.²³ Ultimately, it would address a barrier to IUD use and subsequently increase IUD usage and decrease unintended pregnancies.³⁴ ●

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► Q&A With Sheila Mody, MD; & Rebecca H. Allen, MD

EXPERT INSIGHTS ON Pain Management With IUD Insertion

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Contemporary OB/GYN®: Please provide an overview of the pain often experienced by women during intrauterine device (IUD) insertion.

SHEILA MODY, MD: The pain that patients sometimes experience with IUD insertion is often related to going through the cervix. When the uterus has to be measured, there's something called a *sound* that goes through the cervix, so that can be uncomfortable. The actual applicator of the IUD also goes through the cervix and can cause discomfort. Some patients do experience [cramping] pain afterwards, as...the uterus is reacting to [the inserted IUD].

REBECCA H. ALLEN, MD: The pain experienced by patients is very individualized, because everybody has a different pain tolerance, and everyone has [had] different experiences with medical procedures and pelvic exams in the past, so patients bring their own perspective. In general, studies do show that people who have had vaginal deliveries generally only experience mild pain with IUD insertions (≈ 3-4 of 10) on a 0 to 10 pain scale, whereas people who have only had cesarean deliveries could have increased pain (≈ 5-6 of 10). Then there are patients who have never had a delivery at

all—nulliparous or nulligravid patients—who can, on average, experience moderate to severe pain, in the 6 to 7 of 10 range. Most people can tolerate the IUD insertion in the office with our standard interventions, but, of course, there may be patients who end up requiring IUD insertion under intravenous sedation. [These may include] those with a history of trauma, very young adolescents, [or] those with developmental delay or significant anxiety or pain disorders.

Contemporary OB/GYN: Are there notable variations and pain experiences between different patient populations? What other factors, including medical comorbidities, can influence a patient's experience with pain?

SHEILA MODY, MD: The biggest difference of experience is if [patients] have had [vaginal] deliveries. If they've had vaginal deliveries, that cervix has been opened, so sometimes performing that measurement or placing the applicator through the cervix isn't as painful for those patients [who] have had vaginal deliveries. For people who haven't had deliveries, who we call *nulliparous women*, that can be uncomfortable, because that cervix

has never been really open before. The biggest thing is when we decide [that] we should offer more pain control for people who haven't had children before. The other things that can be risk factors for pain [can include previous] surgical procedures like LEEP [loop electrosurgical excision procedure] that can make the cervix more difficult to get through. That can cause more discomfort as well.

[It appears that there are] more nulliparous patients pursuing IUDs in the post-Dobbs world, because they [really want] to avoid pregnancy. Thinking about pain control for nulliparous women right now is important, because they're motivated, they're scared, and they want to use highly effective birth control. I think we need to meet them in terms of pain control for the procedure.

REBECCA H. ALLEN, MD: Other factors that have been shown in studies to influence pain perception include a history of severe dysmenorrhea, which can put you at increased risk for pain. In addition, patients who report higher levels of anxiety beforehand tend to have more pain. Also, if there has been a [long] interval between the patient's last pregnancy and the IUD insertion, that can [result in] increased pain. Patients who are postmenopausal can have increased pain if they're getting an IUD for noncontraceptive reasons. Timing of insertion according to different phases of the menstrual cycle does not appear to influence the pain experienced, however.

Contemporary OB/GYN: Can you please describe how IUD insertion pain is typically assessed by clinicians versus patients? Are there any limitations or challenges that may lead to these discrepancies and assessments?

SHEILA MODY, MD: Patients are sometimes motivated to get an IUD, because it's a highly

effective method, and they don't have to remember to do things. They may not realize the aspects of the procedure itself, and [they may] go into it not knowing that they are going to have some discomfort with the procedure. Clinicians may or may not know what type of counseling that patient [received] before they saw them, so they might think that the patient knew there might be some discomfort. Sometimes [there may] be a difference between patient experience and [a] clinician not knowing [that there is a] need to counsel [the patient]. The patient may not know that there's any pain associated with the procedure. Some clinicians think it's a very quick procedure and, [because] it's so quick, patients will tolerate it. But for patients, they're building up a lot of courage to come in for the IUD insertion. So even if it's a quick procedure, they are kind of scared of the pain associated with it. There is a difference between those perspectives.

REBECCA H. ALLEN, MD: I agree that [study results] show that providers are notorious for underestimating the amount of pain their patients experience during office gynecologic procedures, and IUD insertion is no exception. As providers, we need to be aware of this and counsel patients about what the true anticipated pain levels are and what interventions we can offer. Patients should be reassured that they can pause or stop the procedure at any time and that they're in control of the process. There definitely can be a difference in how patients perceive the process versus clinicians.

Contemporary OB/GYN: What is your perspective on the currently viral TikTok videos regarding painful IUD insertion?

SHEILA MODY, MD: There have been a lot of [videos] on TikTok recently about patients' pain [and their] experiences, their own ideas with their

own IUDs, and [advice for] other individuals about what] they could experience with the procedure. I also think there are some TikTok [videos] about pain management options, so I think it's a powerful thing to have social media talking about this. It's important for patients to advocate for what they're experiencing, and it's insightful for clinicians to know their perspective about it. I do think there's a middle ground. I think we can meet in the middle and hear patients and then also [consider] the most evidence-based options that we can provide these patients.

REBECCA H. ALLEN, MD: I haven't personally seen the TikTok videos, but I have read about them in journal and newspaper articles. I think it's valid for patients to discuss their IUD insertion experiences as they see fit, and I do think these videos have highlighted a need for us to better address patients' pain. I think nowadays, [when] more and more patients [including people who have never had deliveries before] are using IUDs, ...there's a whole new population of patients getting IUDs, [and] maybe their experiences haven't been well addressed. I do think it's important to note that there is a negative review bias in our society, meaning that people are more likely to post negative reviews of products and experiences than positive reviews. There was a recent study published in *Obstetrics & Gynecology* specifically on the IUD TikTok videos that showed that 95.6% of videos [that conveyed] patient experiences highlighted pain and other [adverse] effects related to IUDs. But we know, based on our clinical experience, that 95% of our patients are not having negative experiences with their IUD insertion. Just because there aren't positive reviews out there about IUD insertions doesn't mean that they don't exist.

Contemporary OB/GYN: Can you please elaborate on the potential consequences of clinicians underestimating the pain

experienced by women during IUD insertion? How can this affect trust between clinician and patient?

SHEILA MODY, MD: I think anyone [who] has a pelvic procedure [is] in a vulnerable situation. If clinicians [do not counsel patients sufficiently], the patients might have some cramping, [and] then I think that can impact trust. [Conversely], if clinicians are very open about the discomfort and at what points of the procedure [this may occur] and have a lot of instructions for afterwards, like what to do for pain and for cramping, I think that would build a more trusting relationship. A lot of clinicians are really well meaning, and they [want] to be able to offer a highly effective method [of birth control]. They may not recognize how scared some of these patients are [during] the actual procedure. Having more time and *TLC (tender, loving care)* around pain control can be very beneficial.

REBECCA H. ALLEN, MD: If [physicians] do not address our patients' pain, and we minimize our patients' pain, that can lead to the consequence of the patient mistrusting their health care provider and the health care system. It is important for us to develop trust with patients. That is why it is important to be honest about IUD insertion pain [and offer] strategies to minimize that pain as much as possible. We do need to validate patients' concerns and ensure that they do not think we are minimizing their pain or gaslighting [their experiences].

Contemporary OB/GYN: Do you find it helpful to prescribe something before insertion to manage potential pain? Can you review the current standards of care that rely on pharmaceuticals?

SHEILA MODY, MD: In the past, we thought [that use of] misoprostol would help with pain during placement of IUDs for nulliparous women,

but we have had multiple studies showing [that] it doesn't help with pain. It potentially causes more adverse effects and pain. I don't routinely recommend or teach giving misoprostol ahead of time. I do think misoprostol helps with facilitating placement, so if you have [a] failed placement, there's a role for it. The thing that people have always [told] patients to take ahead of time is ibuprofen. However, there [have] been [study results showing] that that's not as effective for pain with actual insertion. Naproxen [use] has been shown to help with the cramping afterwards, and ibuprofen can help with the cramping afterwards. But for the actual placement of the IUD, there's not a lot you can do ahead of time. There is something you can do, in terms [of using] lidocaine, for the actual procedure itself. I always tell patients to make sure they eat [before an IUD placement procedure], because some [patients] can feel a little lightheaded afterwards. Make sure that they come with a support person, if that's going to be helpful for them. It's not a requirement,... [but] I recommend not making major plans [for] afterwards.

There have been several studies looking at various interventions for pain control, and lidocaine gel has not been helpful in many of them. [Results of a recent] randomized controlled study showed that there was decreased pain of the IUD placement with a paracervical block. The IUD placement pain without the block was 54 mm [on a] 100-mm point [visual analog] scale [of pain...With] the block, [the score] was 33 mm. When I asked [patients], "What's [your] pain during the placement?" they often say, "Three of 10." It's very real-world that they're experiencing a lower amount of pain with a block. I get a lot of questions about [whether] the block is going to be painful. On a scale of 1 to 10, the paracervical block is very low. In terms of discomfort, it's about a 3 [of 10]. I tell patients [to] breathe in and breathe out during that process. I tell

them when that is going to occur, but that it is going to decrease the pain with the procedure. Most patients totally tolerate that. [The other question I often receive is], "Do you see the benefit of it?" The pain control that you get from the paracervical block is beyond the duration of the actual placement; it also lasts about 5 minutes afterwards. A lot of clinicians seem hesitant to do it, because they feel like it's going to interrupt with their clinic flow by drying up the lidocaine. But I will say patients are really out the door quicker, because they're not lying on the exam table in pain as much afterwards. I haven't seen an [interruption in] clinic flow at all. I'm really hoping more clinicians [will] offer the paracervical block. I've seen such a benefit for my patients.

REBECCA H. ALLEN, MD: I do think it's beneficial to have patients take a nonsteroidal anti-inflammatory drug. That could be oral naproxen, ketorolac, or ibuprofen prior to IUD insertion, usually at least 30 to 60 minutes in advance. It may not help with the actual insertion itself. [There are] mixed data on that, but it can help with the cramping the patient may experience afterwards. We haven't found that oral narcotic agents seem to add any benefit to reducing pain in the procedure. The most effective intervention we do have is the paracervical block, which includes administration of local anesthetic at the tenaculum site. This has been shown to decrease pain with IUD insertion in multiple studies, especially for nulliparous patients. It is true that there is some discomfort with the injection, and it may prolong the procedure; this should be discussed with the patient, but, in my opinion, the benefits of a paracervical block outweigh these downsides. Other agents that have been studied include topical anesthetic agents to the cervix. Studies have shown mixed results with these. They have to be applied between 5 and 15 minutes before

the procedure, and many offices don't stock these kinds of products, like EMLA (lidocaine, 2.5%, and prilocaine, 2.5%) cream or lidocaine, 10%, spray, whereas most clinics do stock injectable lidocaine for various procedures. The paracervical block is an intervention that is more available to providers. Other studies looking at, for example, intrauterine lidocaine infusions have not really shown significant benefits, and studies on nitrous oxide have been mixed in terms of their efficacy in reducing IUD insertion pain. [Additionally], nitrous oxide delivery systems are, again, not available in most standard offices.

Contemporary OB/GYN: What do you do for nonroutine patients such as those with high levels of anxiety? Are there any additional measures that you might consider?

SHEILA MODY, MD: I don't routinely offer any type of sedation or antianxiety medications. If I have someone [who may] have had a traumatic placement in the past and is really petrified of having it placed, I have the benefit of having oral Versed (midazolam) in my clinic. Sometimes we'll offer that with the understanding that it is not going to help with pain, [but] it may help with anxiety. [It is important to make] sure they are clear about that. In terms of other things that we do, we put relaxation music in the room—we play spa music. We turn the lights down a little bit just [to] calm the room. I think that helps the patients, but it also shows that I care about the patient's experience. And so I think that goes a long, long way for patients. Then I think we'll probably talk about this, but I do offer lidocaine for the procedure for nulliparous women.

REBECCA H. ALLEN, MD: For patients with anxiety, I do think it's worth using an anxiolytic before the procedure if they have a ride home. I use 2 mg of sublingual lorazepam, but other

benzodiazepines can also work. There are also patients, as I mentioned before, [who] may require intravenous sedation for IUD insertion. Since most offices are not set up to offer that on site, the patient may have to go to a sedation suite, a surgery center, or a hospital operating room to have the procedure done under sedation, depending on what is locally available. Sometimes, this process can take much longer than an office visit, depending on the site. For example, the only site I have access to for sedation is the hospital operating room, so booking a case there will involve the patient being in the hospital for 4 to 6 hours all told with the [preoperative] area, the procedure, and the [postoperative] care.

Contemporary OB/GYN: Can you please give an overview on nonpharmacologic options and your perspective on their efficacy in comparison to the use of pharmaceuticals?

SHEILA MODY, MD: It's a bit of a data-free zone. We haven't studied music for this procedure, so there have been other [studies], but not for IUD placements. We don't know if that is helpful or not. [Additionally, for] heating pads, we don't have a study showing whether that's helpful or not, although we do offer that. There [haven't] been a lot of studies about nonpharmacologic ways to help with experience. I will say, just from my clinical experience, that the patients really do appreciate all those measures. They're very low cost and low effort; playing some spa music or turning the lights down doesn't take much time or effort to do.

REBECCA H. ALLEN, MD: I think [that] nonpharmacologic options [used] in combination with other approaches are best; a multimodal approach often works better. Verbal analgesia and distraction is very important in making our patients feel comfortable throughout the

process. Support staff can hold the patient's hand during the procedure and distract them with conversation or positive imagery. Gentle language from the provider during the procedure can be helpful....[Use of] hot packs or cold compresses [has not decreased] pain in randomized controlled trials, but [it] can provide distraction and [is not] harmful. The same [is true] with music in the background or aromatherapy. Again, a lot of these have not been proven to reduce pain, but they can provide distraction and a more comfortable environment during the procedure.

Contemporary OB/GYN: Could you elaborate on how procedure alterations (eg, using different forceps) may influence the pain experience for the patient?

SHEILA MODY, MD: [In terms of using] the speculum [and] making sure to use the appropriate speculum, there is a smaller speculum called the Peterson as opposed to a Grey speculum for nulliparous [patients]. I use the Peterson; it's smaller for the nulliparous individuals. A metal sound is the traditional tool to measure the uterus. I tend to use a plastic sound or an endometrial biopsy pipelle, and I think that may decrease a little bit of the discomfort with the sounding process. There isn't a lot of equipment that we use for the placement, but those are the ways to alter them.

REBECCA H. ALLEN, MD: Unfortunately, [study results] have not shown that using an atraumatic tenaculum or ring forceps decreases pain during the procedure compared with the standard single-tooth tenaculum. I don't think [the] type of tenaculum you use makes a difference, per se. We know that the tenaculum is an important part of the procedure, because it does allow you to straighten out the angle between the cervix and the uterus and allow for proper placement

of the IUD. That's why numbing the cervix at the site of tenaculum placement is the best intervention that we have.

Contemporary OB/GYN: Given the broad variability and pain experience across each patient, how can clinicians optimize their ability to assess incoming patients and select the pain management strategy that best meets individual needs during IUD insertion?

SHEILA MODY, MD: It's hard to tell who is going to have discomfort or not. I will say, if you had to pick 1 risk factor, it would be nulliparous vs multiparous. I do think the experience is very different for those 2 groups. I routinely offer paracervical lidocaine block for all of our nulliparous patients; most will opt for it. [It is important to consider counseling. Patients] are anticipating so much pain, and the lidocaine block helps them so much. [For] multiparous women, the block may not be worth it. There is a little discomfort with the block itself. We do give lidocaine for multiparous women at the tenaculum site, because I do use a single-tooth tenaculum; just [giving] a little bit of lidocaine does decrease the pain for [the patient] at the tenaculum site.

REBECCA H. ALLEN, MD: It's definitely a shared decision-making process with the patient as you're counseling them about the IUD insertion process....Patients should be alerted to the available options, such as using nonsteroidal anti-inflammatory drugs beforehand and the availability of a paracervical block. Some patients may not want the paracervical block, because it involves a needle and additional time with the speculum in place, but others may want to [use] it. In talking to the patient, you may discover that [she is] a person who actually needs intravenous sedation...to tolerate the procedure. We just need to have various options available for patients and have the patients involved in choosing options [that] work best for them. ●



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