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How Should Gynecologists Respond in the Moment to Physiological, Historical, and Psychosocial Features of Patients' Pain?

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Abstract

Patients should receive appropriate pain relief when undergoing procedures. This article canvases historical and sociological underpinnings of how clinicians have responded and should respond in the moment to patients' pain during elective gynecologic procedures, such as intrauterine device placement and first-trimester abortion. This article then considers evidence-based techniques for responding to patients' pain expressions and experiences during such procedures. Finally, this article addresses the nature and scope of clinicians' obligations to respond in the moment to patients' needs when complete pain relief might not be possible.

An Introduction to Gynecologic Pain

Physicians have the tools and training to improve patients' experiences by mitigating pain during elective clinical procedures. We believe fully and wholeheartedly that patients should not have to tolerate pain during elective procedures, yet our experiences as gynecologists and family planning specialists repeatedly reveal our and our colleagues' hypocrisy. Gynecologists commonly perform procedures, such as intrauterine device (IUD) insertion and uterine evacuation for pregnancy loss and termination, which patients find painful or even excruciating. In other areas of medicine, potentially painful procedures are not performed without analgesia. With screening colonoscopies, for example, patients undergo invasive procedures and routinely receive moderate or deep sedation.[1] Stark inequity between gynecology and other specialties forces us to reckon with why, for gynecologic procedures, we have been socialized to expect that our patients will tolerate pain. Patients are becoming increasingly and appropriately empowered to expect better pain control from their gynecologists, many of whom have yet to recognize their own inadequate management of expectations of gynecologic pain and often undertreat it. Here, we offer perspectives on how to respond with care to both anticipated and unanticipated pain in office gynecology. We then outline strategies for reducing pain during conscious gynecologic procedures, while acknowledging historical, sociological, and political factors that make eliminating all pain a persistent challenge.

A Physiologic Explanation of Gynecologic Pain

To understand gynecologic pain management, one must understand the differential, rather than the singular, origins of pelvic and gynecological organs' innervation. The upper uterus is innervated by sympathetic nerve fibers deriving from vertebrae T10-L3, while the lower uterus and cervix are innervated by paravertebral ganglia, principally L2-L4. Parasympathetic innervation of the uterine body and fundus derives primarily from S2-S4.[2,3] This complex neurologic anatomy makes a complete nerve block—like one might receive at the dentist or for certain orthopedic procedures—nearly impossible.

Despite having conducted countless research studies aimed at understanding how to prevent procedural pain with local or oral sedation, gynecologists find themselves only able to reduce pain at best. A paracervical block with lidocaine is one of the most successful techniques for reducing pain.[4,5,6] Unfortunately, paracervical blocks involve an injection given at up to 4 sites adjacent to the cervix. To avoid injection site pain, vaginal lidocaine gel administered by the patient has also been studied for first-trimester surgical abortion-related pain and was found to be noninferior to a paracervical block in reducing pain in a randomized trial.[7] Nevertheless, because IUD insertions and uterine evacuation procedures can stimulate the uterine fundus or cause uterine contractions, patients often still experience pain from nerve groups outside the physiologic boundaries of the paracervical block. Unfortunately, most nonsteroidal anti-inflammatory drugs and narcotics, as well as prophylactic misoprostol, have not been shown to effectively alleviate pain during IUD insertions.[8,9,10] Only naproxen and tramadol given prior to IUD insertions have been shown to reduce pain during insertion but, again, do not relieve all pain.[11] Similarly, intrauterine lidocaine infusion was found to be ineffective at reducing pain during first-trimester surgical abortions.[12]

Gynecologic Pain in Historical and Social Context

Some gynecologists attempt to normalize or trivialize the pain endured by patients during procedures. While there are many possible explanations for this practice, one explanation lies in the historical denial of women and pregnancy-capable peoples' pain and in social expectations that women and pregnancy-capable people will endure pain.

We must acknowledge that the origins of modern gynecology are rooted in procedures conducted on enslaved Black women without anesthesia and without consent. Based on racialized and gendered notions of biological difference, physicians ignored subjects' lived experiences, touting themselves as professional experts with a more accurate understanding of the pain sensitivity of female reproductive tissues. For example, Lucy, Betsey, and Anarcha were three of the enslaved women documented to have undergone experimental vesicovaginal fistula surgeries by Dr Marion Simms in the 1840s without anesthesia.[13] Trivialization of these women's pain by once-reputable physicians, together with the long-standing rationalization of pain during childbirth as normal or natural, cemented sociocultural expectations for women and pregnancy-capable people to simply endure pain. Even as pain control for other procedures became available, physiologic challenges of gynecologic pain control and limitations of gynecologic equipment to prevent pain may have tacitly justified even severe pain's inevitability. Consequently, female-bodied patients in all medical fields, particularly patients of color, remain undertreated and misdiagnosed when it comes to pain.[14,15,16]

In order to dismantle these erroneous notions about women's and pregnancy-capable people's pain, it is important for us as gynecologists to name these false beliefs out loud. We must acknowledge our previous failures at managing pain, including their

racist and misogynist origins. We must elucidate and acknowledge patients' concerns about pain and discuss with them which options can be deployed for pain relief prior to the start of any procedure, as well as how pain relief might be adapted during a procedure when needed. Without taking these steps, we have not obtained adequate informed consent.

As abortion clinicians, we, the authors, also commonly care for many patient groups for whom gynecologic procedures can trigger anxiety or trauma. We care for adolescents who may never have had a pelvic exam before. Additionally, we care for patients who are survivors of intimate partner violence or sexual assault. In the United States, 54.3% of women and pregnancy-capable people report some sort of contact sexual violence in their lifetime, and approximately 1 in 4 report a history of rape or attempted rape.[17] Women of reproductive age particularly are at high risk of intimate partner violence.[18] The experience of anxiety and retraumatization leading up to procedures can profoundly exacerbate perceived pain.[19] The social contexts faced by female-bodied patients thus can make gynecologic pain intolerable in ways that a paracervical block could never treat.

To address these cases, gynecologists can use trauma-informed care techniques in addition to pain and anxiety relief modalities to support and empower patients during these procedures. These techniques include, but are not limited to, allowing patients to have a support person with them, discussing patients' concerns and anxiety about pain and pain relief prior to an exam or procedure, anxiolytic medications as needed, asking permission before starting any exam, allowing patients to place the speculum themselves, asking patients to part their knees instead of physically guiding them, warning patients prior to painful aspects of the procedure, and stopping the procedure if and when asked.[20,21] All of these techniques are aimed at restoring patients' sense of control and reducing both physical and psychological pain, although even these techniques may be insufficient.

Complete Gynecologic Pain Relief?

When pain cannot be managed adequately during a conscious procedure, one option is moderate or deep sedation via administration of midazolam and fentanyl or of propofol under the care of a specifically trained clinician.[22,23] While sedation is optimal for pain relief, it remains a limited resource in outpatient settings due to insufficient staffing, training, space, and time. In a recent study of clinics that provide first-trimester aspiration abortion, only 38% of clinicians reported routinely providing moderate sedation.[24] Additionally, only some clinical spaces are equipped and licensed to offer moderate sedation. Lastly, providing moderate sedation safely takes longer, so fewer appointments are available per day. As a result, moderate sedation is not an available option in many outpatient clinics, and, when it is, it often results in delayed care. To receive moderate or deep sedation, patients frequently must be referred to an outpatient surgery center or an operating room.

At the level of individual patients, moderate sedation presents additional barriers. It requires additional screening, as medical conditions such as obesity, active substance use, asthma, and uncontrolled chronic medical conditions are often considered contraindications to moderate sedation in the outpatient setting due to patient safety concerns.[25] Additionally, moderate sedation can add to patients' costs, and someone generally needs to accompany a patient home after moderate sedation. For patients undergoing stigmatized procedures such as abortions, emotional distress caused by

disclosing their health care to another person, finding childcare, paying for additional services, taking additional days off work, or delays in care may dispose them to endure more physical pain and forego moderate sedation. Thus, while a technological option for more complete pain control exists, institutional- and individual-level barriers currently prevent its more widespread adoption.

Clinician Adaptability

Being able to predict what is to come is a particularly valuable skill in medicine. However, like so many things, pain often cannot be predicted. Thus, it can be hard for a gynecologist to decide whether to cause a small amount of physical pain, such as by administering a paracervical block, or logistic pain, such as by requiring the patient to arrange a ride in order to receive moderate sedation, in order to relieve potentially greater physical pain. This risk-benefit analysis should be part of a shared decision-making conversation during the informed consent process with the patient.

Prior to performing a gynecologic procedure, it is important to counsel patients honestly and with transparency on what pain they can expect by using accurate descriptions of pain instead of, for example, "a small prick" or the catchall term "crampy." While clinicians may try to counsel patients by making comparisons to prior experiences, such as menstrual cramps or labor pains, these analogies are frequently insufficient to capture the personal experience of uterine instrumentation. Unfortunately, many patients have no frame of reference for what they will experience. Additionally, many people have lost trust in the patient-physician relationship due to historical trauma.[26]

It is also important to counsel patients on what pain and anxiety relief options are available, including the options mentioned above. After this discussion, patients should be allowed the autonomy to decide the level of pain they can tolerate. Even when painful, gynecologic procedures may be tolerable and acceptable to some patients, depending on their preparedness or their prior experiences with pain.

Yet when patients undergo their procedure, they receive a new set of experiential information that may alter their decision about pain relief and even their consent for the procedure itself. Consequently, clinicians must be able and ready to adapt to these changing patient needs when necessary. A written informed consent should not be seen as binding or protective for clinicians; true informed consent may exist on a continuum based upon the continuously changing context of the patient's experience while a procedure is occurring. If a patient decides at any point that they would no longer like to continue, it is imperative that the clinician stop the procedure at that point. From there, a discussion can be had as to whether to resume the procedure or not, with or without additional pain medication, but the initial request to stop the procedure must be honored.

Preventing Gynecologic Pain Is Political

The medical support system needed to provide all patients undergoing gynecologic procedures with complete and timely pain relief does not currently exist. However, returning to our colonoscopy analogy, the infrastructural and personnel needs for gastroenterologists to offer routine sedation are well established. This inequity in pain control could at least in part be due to a social and systemic undervaluing of women and pregnancy-capable people's pain and health. As discussed above, female-bodied patients, particularly people of color, are frequently undertreated for pain in medical settings.[14,15,16] Recent studies have also shown that procedures performed on female

bodies are reimbursed at lower rates than similar procedures performed on males.[27,28] Lastly, after the Supreme Court's reversal of federal protections on abortion, many outpatient clinics offering family planning services, including pregnancy termination, pregnancy loss management, and intrauterine contraception, have been forced to close nationwide.[29,30] These facts make it harder for gynecologists to see patients and get procedure space and operating room time, thus impeding patients' access to safe and timely care, if they are able to access care at all.

Gynecologists have drawn significant media attention for their perpetration of painful gynecologic procedures, particularly IUD insertions.[31,32] These examples serve as an important reminder for gynecologists to maintain humility in their relationships with patients and openly acknowledge their limitations. Nevertheless, even when applying evidence-based techniques to alleviate pain and providing patient-centered, trauma-informed care, gynecologists may fail to succeed in preventing all pain. This outcome highlights that pain is not solely under the gynecologist's control; it may have deeper roots in historical, social, and political disparities that warrant further attention. Patients deserve to know that their gynecologists have acknowledged these disparities and will work with them to find solutions and treatments that are tolerable to them and, in so doing, contribute to addressing and dismantling pain care inequity.

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