Relias Media
From Relias

Vol. 37, Issue 12, April 2021
ReliasMedia.com

OB/GYN Clinical [ALERT]

Evidence-based commentaries on women's reproductive health

ABSTRACT & COMMENTARY

A Prospective Look at the Course of Untreated ADHD in Pregnancy Gains Attention

By Nicole Cirino, MD, CST, IF

Reproductive Psychiatrist, Associate Professor of Psychiatry and OB/GYN, Oregon Health & Science University, Portland

SYNOPSIS: Twenty-five women with perinatal attention-deficit hyperactivity disorder were followed prospectively during pregnancy for changes in anxiety, depression, perceived stress, and functional impairment. Statistically significant differences in mood and functional impairment in the family domain were found in those who discontinued their psychostimulant.

SOURCE: Baker AS, Wales R, Noe O, et al. The course of ADHD during pregnancy. *J Atten Disord* 2020; Dec 11. doi: 10.1177/1087054720975864. [Online ahead of print].

The aim of this study was to characterize the maternal course of attention-deficit hyperactivity disorder (ADHD) during pregnancy for women 18 years of age and older. This observational cohort design followed 25 women with ADHD throughout pregnancy, with the initial evaluation occurring at less than 20 weeks and the two follow-up assessments at 24 weeks and 36 weeks of gestation. They used validated scales assessing ADHD illness severity, depression, anxiety, and functional outcomes. Clinician-rated scales included the Montgomery-Asberg Depression Rating Scale (MADRS), the Adult ADHD Investigator Symptoms Rating Scale (AISRS), and the Clinical Global Impression (CGI). Self-rated scales used included the Edinburgh Postnatal Depression Scale (EPDS), the Generalized Anxiety Disorder 7-item (GAD-7) scale, the Perceived Stress Scale (PSS), and the Weiss Functional Impairment Rating Scale Self-Report (WFIRS-S). Of note, the AISRS has both hyperactive-impulsive and inattentive subscales. The WFIRS-S identifies impairment from ADHD in distinct areas using the subscales Family, School, Life Skills, Self-Concept, Social Activities, and Risky Activities.

Financial Disclosure: Dr. Rebecca H. Allen, editor, reports that she receives grant/research support from Bayer, and is a consultant for Bayer, Mylan, and Merck. Dr. Sarah J. Betstadt, peer reviewer, reports that she is on the speakers bureau for Merck. All of the relevant financial relationships listed for these individuals have been mitigated. None of the remaining planners or authors for this educational activity have relevant financial relationships to disclose with ineligible companies whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients.

OB/GYN Clinical [ALERT]
Evidence-based commentaries on women's reproductive health

OB/GYN Clinical Alert (ISSN 0743-8354) is published monthly by Relias LLC, 1010 Sync St., Ste. 100, Morrisville, NC 27560-5468. Periodicals postage paid at Morrisville, NC, and additional mailing offices. POSTMASTER: Send address changes to *OB/GYN Clinical Alert*, Relias LLC, 1010 Sync St., Ste. 100, Morrisville, NC 27560-5468.

GST Registration Number: R128870672.

SUBSCRIBER INFORMATION
(800) 688-2421
customerservice@reliasmedia.com
ReliasMedia.com

Questions & Comments:
Please contact Editor **Jason Schneider**, at jschneider@relias.com

Back issues: $42. Missing issues will be fulfilled by customer service free of charge when contacted within one month of the missing issue's date.
Canada: Add 7% GST and $30 shipping.
Elsewhere: Add $30 shipping.

ACCREDITATION

JOINTLY ACCREDITED PROVIDER™
INTERPROFESSIONAL CONTINUING EDUCATION

In support of improving patient care, Relias LLC is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

The Relias LLC designates this enduring material for a maximum of 2 *AMA PRA Category 1 Credits*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

2 ANCC contact hours will be awarded to participants who meet the criteria for successful completion.

This CME activity is intended for the OB/GYN. It is in effect for 36 months from the date of the publication.

Of the 25 women, three prospective groups emerged: five women who discontinued ADHD medications (Group A); eight women who changed their ADHD medication regimen to maintain therapeutic benefits "as needed," or PRN (Group B); and 12 women who continued their ADHD medication with no changes through pregnancy (Group C). Fifty percent of participants had a comorbid diagnosis of generalized anxiety disorder and 32% had major depressive disorder. All women were being treated initially with the psychostimulants amphetamine (64%) or methylphenidate (33%).

The results of three measures — one scale (EPDS) and two subscales (AISRS-Hyperactive and WFIRS-Family) — indicated statistically significant differences among the groups over time. The results for the AISRS-Hyperactive sub-score found adjusted mean changes of discontinuers (-0.39), the PRN group (-1.92), and maintainers (-2.78) showing a significant difference between those who discontinued medication vs. those who changed their medication of 2.39 ($P = 0.0128$). The total EPDS score showed adjusted mean changes of discontinuers (4.32), medication as needed (-1.01), and maintainers (-0.65), with significant differences between those who discontinued medication and those changing medication as needed (5.3, $P < 0.0001$) and between discontinuers and maintainers (4.98, $P = 0.0009$). The mean for all points of measure in all three groups did not reach clinical levels suggestive of depression (EPDS > 13). For the sum of the WFIRS-Family domain, the adjusted mean changes of discontinuers (1.55), medication as needed (-1.70), and maintainers (-1.54), showed significant differences between those who discontinued medication and those who changed medication as needed (3.3, $P = 0.0309$) and between discontinuers and maintainers (3.09, $P = 0.0197$). Of note, the WFIRS-Family subscale is scored on a 0 to 33 scale, with 33 showing the highest level of impairment.

The authors concluded there was not a clinically meaningful significant difference found between groups in terms of overall ADHD symptoms, but women who discontinued psychostimulant treatment during pregnancy had "significant impairment in family functioning" and that the "combined increase in depressed mood symptoms and functional disability in the family domain suggest that symptoms alone may not be a reliable proxy for overall functioning."

■ COMMENTARY

As compared to perinatal mood and anxiety disorders (PMADs), perinatal ADHD and its primary treatment modality, psychostimulants, have a lack of systematic data in the perinatal period to guide decision making. ADHD affects approximately one in 30 women and is associated with depression, anxiety, substance use disorders, and impairment in psychosocial functioning. Psychostimulants are among the most commonly prescribed medication during pregnancy, with an estimated 1% prevalence.[1]

This is in stark contrast to untreated depressive illness during pregnancy, which has a large body of literature showing adverse effects on obstetrical, perinatal, and neurobehavioral outcomes.[2] Untreated ADHD has not been shown, prior to this study, to cause such negative outcomes. Although this current study attempts to address this, it falls short in proving that any clinically significant impairment exists in untreated ADHD.

The small sample size of 25 women, only 13 of whom discontinued or decreased their medication, is in itself a limitation of this study. The five women who discontinued their psychostimulants in this sample showed only statistically significant impairment in three of all the areas that were assessed. Although these were statistically significant, it can be argued that these small changes are not clinically significant. The assessments measured did not show any negative effect in categories of mood (GAD-7, MADRS, CGI), perceived stress (PSS), or even total symptom burden of ADHD. The WFIRS-S did not show impairment in the other domains, including Life Skills, Self-Concept, Social Activities, or Risky Activities. Furthermore, the statistically significant measures that showed change still did not reach clinical significance, i.e., average EPDS did not reach a positive value (> 13) during any point of the observation. The WFIRS showed a mean change of 3.09. A total score change of 13 is considered clinically significant improvement.[3] This contrasts with the safety profile of psychostimulants, which, although limited, have been associated with a small but significant

increased rate of malformations, shorter gestational age, preterm delivery, adverse placental outcomes, and possibly increased risk of central nervous system disorder in neonates.[4,5] Although the first of its kind to address maternal adverse effects of discontinuing stimulants, the data in this study will not change my practice at this time. Psychostimulant use in pregnancy may be a higher overall risk when continued vs. discontinued.

In my practice, I encourage continuing psychostimulants only in severe ADHD, when illness severity, if untreated, can lead to more severe outcomes, such as hazardous driving, risk of job loss and income, severe difficulty parenting, or uncontrolled comorbid mood and anxiety disorders or developmental disorders. Thoughtful behavioral and psychosocial interventions remain the preferred treatment for mild to moderate perinatal ADHD. ■

REFERENCES

1. Louik C, Kerr S, Kelley KE, Mitchell AA. Increasing use of ADHD medications in pregnancy. *Pharmacoepidemiol Drug Saf* 2015;24:218-220.
2. Yonkers KA, Wisner KL, Stewart DE, et al. The management of depression during pregnancy: A report from the American Psychiatric Association and the American College of Obstetricians and Gynecologists. *Gen Hosp Psychiatry* 2009;31:403-413.
3. Canadian ADHD Resource Alliance. Weiss Functional Impairment Rating Scale. https://www.caddra.ca/wp-content/uploads/WFIRS-S.pdf
4. Koren G, Barer Y, Ornoy A. Fetal safety of methylphenidate–A scoping review and meta analysis. *Reprod Toxicol* 2020;93:230-234.
5. Baker AS, Freeman MP. Management of attention deficit hyperactivity disorder during pregnancy. *Obstet Gynecol Clin North Am* 2018;45:495-509.

ABSTRACT & COMMENTARY

Loop Electrosurgical Excision Procedure of the Cervix: Which Is the Best Method of Anesthesia?

By Rebecca H. Allen, MD, MPH, Editor

SYNOPSIS: In this randomized controlled trial comparing local anesthesia and general anesthesia for loop electrosurgical excision procedure of the cervix, there was no difference in patient satisfaction. However, women in the local anesthesia group had significantly smaller cone volumes and less blood loss than those in the general anesthesia group.

SOURCE: Rezniczek GA, Hecken JM, Rehman S, et al. Syringe or mask? Loop electrosurgical excision procedure under local anesthesia: A randomized trial. *Am J Obstet Gynecol* 2020;223:888.e1-888.e9.

This randomized controlled trial was conducted from July 2018 to February 2020 in Germany. All women presenting for loop electrosurgical excision procedure (LEEP) of the cervix were offered participation. Exclusion criteria included pregnancy, prior LEEP or conization, language barrier, concomitant oncological disease, known thrombophilia, or anticoagulant use. In the local anesthesia group, the cervix was injected with 2 mL of 0.5% bupivacaine at the two o'clock, four o'clock, seven o'clock, and 11 o'clock positions without any vasoconstrictor and one minute was allowed for the anesthesia to take effect.

The transformation zone was graded into three types: type 1 (fully visible), type 2 (partially visible), and type 3 (not visible; dilute acetic acid was used to identify the lesion). The LEEP was performed with the electrocautery on full cut and bypassing the loop from top (12 o'clock) to bottom (six o'clock). Any fragmentation of the specimen was noted. No endocervical curettage was performed, and hemostasis was obtained with a ball electrode. In the general anesthesia group, anesthesia was induced by intravenous fentanyl. Propofol and a laryngeal mask airway was inserted using sevoflurane for maintenance. Only three surgeons performed the procedure. Previous to this study, LEEPs were performed only under general anesthesia at this institution; therefore, each surgeon performed three LEEPs under local anesthesia for training prior to study initiation. The primary endpoint was patient satisfaction on the day of surgery and two weeks after surgery, assessed on a scale of 0 to 10. Other data collected included pain level after surgery on a scale of 0 to 10, margin status, cone volume, intraoperative blood loss measured by change in hemoglobin between the day before the LEEP and four to five hours after the LEEP, procedure time, complications, bleeding after surgery, and satisfaction of the surgeon.

The authors approached 229 women for the study. Five did not meet inclusion criteria, seven declined to participate, and nine were used for training LEEPs, leaving 208 women to be randomized. The majority of subjects were undergoing LEEP for a high-grade biopsy of the cervix. In the intention to treat analysis, there was no difference in patient satisfaction immediately after the surgery (100 vs. 100; $P = 0.077$) nor in pain

level after surgery (10 local anesthesia vs. 20 general anesthesia; $P = 0.75$). Two weeks after surgery, there was no difference in patient satisfaction, pain level on the first day, duration of pain, and bleeding severity on the first day. However, subjects in the local anesthesia group reported significantly fewer total days of bleeding (7.5 vs. 13; $P = 0.026$) compared to the general anesthesia group. Similar proportions would choose the same type of anesthesia again (84% local anesthesia vs. 82% general anesthesia; $P = 0.179$).

However, 15 patients randomized to local anesthesia crossed over to the general anesthesia group because of fear of pain. Therefore, in the per-protocol analysis, positive margins were present in 6.6% of the local anesthesia group and 2.1% of the general anesthesia group ($P = 0.258$). Cone volume was significantly less in the local anesthesia group compared to the general anesthesia group (1.11 cm^3 vs. 1.58 cm^3; $P = 0.001$). Fragmentation was similar (12% local anesthesia vs. 6.4% general anesthesia; $P = 0.276$), as was procedure duration (151.5 seconds local anesthesia vs. 180 seconds general anesthesia; $P = 0.342$). Change in hemoglobin was lower at 0.2 in the local anesthesia group compared to 0.5 in the general anesthesia group, $P = 0.001$. There was no significant difference in adverse effects or complication rates between the two groups. In a multivariable analysis of patient satisfaction, only parity, type of transformation zone, and cone volume influenced patient satisfaction, but study group allocation did not.

■ COMMENTARY

LEEP conization of the cervix is one of the most common methods to treat cervical dysplasia worldwide.[1] The authors of this study wanted to compare, in a randomized fashion, local anesthesia to general anesthesia for LEEP procedures, given that practice patterns vary across gynecologists, hospitals, and countries. According to the authors, LEEP is more commonly performed under local anesthesia in English-speaking countries (e.g., the United States, the United Kingdom, and Australia) and more commonly under general anesthesia in Europe and Asia. The organization that guides colposcopy practice in the United States, the American Society for Colposcopy and Cervical Pathology (ASCCP), does not specify guidelines for LEEP procedures or anesthesia choice.

The authors chose to focus on patient satisfaction as their primary outcome and did not find much of a difference. However, they did find significantly smaller cone volumes in the local anesthesia arm. I suspect this might be the result of surgeon concern over patient comfort during the procedure, perhaps in terms of hesitating to perform a larger cone in the local anesthesia subjects. However, it is possible that this could be because of the fact that the surgeons in this study had performed only three LEEPs under local anesthesia prior to beginning the study protocol. The smaller cone volumes could be either an advantage in terms of future childbearing or a disadvantage in terms of margin status and fragmentation. Although there was no statistical difference between the two groups in terms of these variables, there was a trend toward more positive margins and more fragmentation of the specimen in the local anesthesia group. The decreased blood loss as measured by the change in hemoglobin and the shorter duration of bleeding post-procedure in the local anesthesia group also could be directly related to the cone volume. Given that the usual practice in the authors' home country is general anesthesia, they concluded that local anesthesia was a safe and effective alternative associated with similar levels of patient satisfaction.

One component of this study that makes it less generalizable to the United States is that endocervical curettage was not performed after the LEEP. This often is a component of LEEPs in the United States to ascertain the superior margin and it may add more discomfort to the procedures under local anesthesia. Additionally, a vasoconstrictor agent was not used at all, which often is done in the United States for both local anesthesia patients and women undergoing procedures under general anesthesia for purposes of hemostasis.[2] Nevertheless, the fact that the study was randomized is a significant strength. It is impressive that the investigators were able to randomize so many participants to vastly different types of anesthesia. I doubt this would be feasible in the United States. Interestingly, only 15 women crossed over from local anesthesia to general anesthesia because of fear of pain.

In many U.S. practices, local anesthesia is the standard of care because of decreased costs and increased efficiencies in practice compared to general anesthesia, which requires an outpatient surgicenter or hospital operating room.[2] Patient selection for local anesthesia in the office is important. Frequently, patients may opt for higher levels of anesthesia because of anxiety and fear of pain. The surgeon may opt for general anesthesia as a result of the anticipated difficulty of the procedure. In our practice, patients generally are given the choice of an office procedure or a procedure in the operating room if they are deemed a candidate for an office procedure based on their anatomy, visualization, size of the lesion, and ability to cooperate with the procedure. Therefore, although this study is reassuring that patients will be satisfied with either method of anesthesia, I do not see the results changing my current clinical practice. ■

REFERENCES

1. Santesso N, Mustafa RA, Schunemann HJ, et al. World Health Organization guidelines for treatment of cervical intraepithelial neoplasia 2-3 and screen-and-treat strategies to prevent cervical cancer. *Int J Gynaecol Obstet* 2016;132:252-258.
2. Pierce JG Jr., Bright S. Performance of a colposcopic examination, a loop electrosurgical procedure, and cryotherapy of the cervix. *Obstet Gynecol Clin North Am* 2013;40:731-757.

ABSTRACT & COMMENTARY

Is it Safe to Discharge Patients Without an Opioid Prescription After Gynecologic Surgery?

By Mitchell Linder, MD

Assistant Professor, Department of Obstetrics and Gynecology, University of Rochester School of Medicine and Dentistry, Strong Memorial Hospital, Rochester, NY

SYNOPSIS: In this quality improvement initiative study, patients undergoing scheduled gynecologic abdominal surgery via both minimally invasive and open routes were able to be discharged safely without a prescription of opioids without significant increases in postoperative calls about pain or the need for filling opioid prescriptions after discharge.

SOURCE: Margolis B, Andriani L, Baumann K, et al. Safety and feasibility of discharge without an opioid prescription for patients undergoing gynecologic surgery. *Obstet Gynecol* 2020;136:1126-1134.

The authors of this retrospective cohort study sought to evaluate a quality improvement (QI) initiative aimed at decreasing the amount of opioids a patient was given after minimally invasive or open gynecology surgery in the gynecologic oncology department of a single institution. Their QI project employed a three-tiered approach, including preoperative counseling, standardization of perioperative analgesia, and a postoperative prescription algorithm. Exclusion criteria for the project included patients who underwent procedures in conjunction with other departments; those who had vulvar, vaginal, or hysteroscopic procedures; and those with a documented allergy to both ibuprofen and acetaminophen. A six-month historical control cohort was used to compare to the six-month window after the initiative was put in place.

After the six-month intervention was completed, a retrospective chart review was undertaken for analysis. Data collection included patient demographics, baseline characteristics, and procedure details as well as perioperative deaths. Post-discharge phone calls to the office and any need for new opioid prescriptions or refills also were included in data collection. The primary outcome measure was a reduction in the percentage of patients discharged without an opioid prescription. Various thresholds were put in place in case the initiative was found to worsen patient care. Patients were surveyed with questions including opioid usage, pain control strategies, and pain scores at the two-week postoperative mark.

The preoperative counseling tier of the project consisted of standardized education sessions with a trained nurse, including targeted pamphlets and a specific script with postoperative expectations detailing the goal to give limited or no opioids upon discharge. Patients also were screened for any preexisting opioid use disorders using a standardized tool. The perioperative analgesia platform included enhanced recovery items, such as preoperative acetaminophen and pregabalin, early feeding and ambulation, and postoperative multimodal opioid-sparing analgesia. Regarding the postoperative prescription intervention, patients were given gabapentin as well as ibuprofen and acetaminophen. A four-tablet prescription for 5 mg of oxycodone was given on discharge only if the patient had stayed overnight in the hospital and required more than five opioid administrations during their hospitalization.

There were 398 patients in the preintervention window and 375 patients in the postintervention window. Of those, 122 patients in the preintervention group and 119 patients in the postintervention group were removed because of exclusion criteria. This left 256 patients in the preintervention group and 276 patients in the post-intervention group. The samples were not statistically different regarding age, body mass index, smoking status, prior abdominal surgeries, or preoperative benign vs. malignant diagnoses. There were more white patients in the preintervention group (71% vs. 63%) and more patients with chronic opioid use (six vs. one). Perioperative characteristics, such as perioperative pain scores, length of stay, median duration of procedure, surgery route, and proportion of staging/debulking surgeries, were similar among the two time periods. Provider compliance with the established protocol was found to be 85% or greater.

When evaluating for the primary outcome, the number of patients discharged with an opioid prescription was decreased significantly from 82.7% preintervention to 23.1% postintervention; 82.9% of patients who underwent a minimally invasive hysterectomy and were discharged on day 0 or day 1 went home without any opioids. The mean number of opioid tablets prescribed was significantly reduced across all surgeries from 7.2 tablets to 1.8 tablets ($P < 0.001$).

From a postoperative perspective, the percentage of patients contacting the office after discharge was consistent across the two groups (6.5% vs. 5.9% postintervention). Postoperative complications (8.3% vs. 12.9%, $P = 0.09$) and patient calls for pain (8.3% vs. 10.9%, $P = 0.31$) were not significantly increased postintervention. Patient reported data from the two-week postoperative surveys showed 91% either "agreed" or "strongly agreed" that their pain was well controlled after surgery.

■ COMMENTARY

It is more than obvious that there is an opioid crisis in the United States. Prescription drugs play a large role in this epidemic. According to the Centers for Disease Control and Prevention, 450,000 people died from an overdose involving opioids between 1999 and 2018, with prescription opioids being a contributor in almost six deaths per 100,000 population in 2017.[1] A large contributor to this is excess narcotics given on discharge from the hospital, potentially giving access to both the patient as well as family members or friends. Numerous interventions have begun to take place at various levels of government and at the institutional level to help curb opioid prescriptions. In addition, many medical societies have published advanced recovery from surgery guidelines to help avoid the need for narcotics.

Thanks to these efforts, we are now starting to see a decrease in the prescription opioid-involved death rate, which decreased by 13.5% from 2017 to 2018.[2] This study looks to further efforts to help reassure providers that it is both safe and reasonable to discharge patients with minimal to no opioids, even after major gynecologic surgeries. The authors pointed out their intervention adds to the existing evidence in support of minimizing discharge opioids, as they focused on ambulatory hysterectomies and the postoperative use of gabapentin. They attributed a large degree of the success of the program to institutional buy-in and commitment to compliance with the protocols. The authors found positives in the fact that their data collection at each step of the process was thorough, including the two-week patient postoperative surveys. They acknowledged the study's shortcomings, including the absence of randomization and the likely lack of generalizability of their results to other institutions given that their cohort was largely insured, urban, and relatively homogenous. They also pointed to the limitations that are inherent with retrospective chart reviews, since, although this was a prospective intervention, any chart review may miss important clinical information that occurred but was not documented or happened at an outside facility.

I find this study interesting in that our institution has only just begun the process of outpatient hysterectomies. Some of our providers are hesitant to send patients home without medication because of concern for postoperative pain control issues in the first number of hours after surgery. This study helps provide reassurance that, with the properly selected patient who has been adequately counseled about postoperative expectations and given a standardized non-opioid pain control regimen of prescriptions, same-day discharge — even from what once were considered major abdominal procedures — can be completed safely with limited to no opioids and without affecting patient pain control. ■

REFERENCES

1. Centers for Disease Control and Prevention. Wide-ranging online data for epidemiologic research (WONDER). https://wonder.cdc.gov/
2. Wilson N, Kariisa M, Seth P, et al. Drug and opioid-involved overdose deaths—United States, 2017-2018. *MMWR Morb Mortal Wkly Rep* 2020;69:290-297.

ABSTRACT & COMMENTARY

Does Prescription of Contraception During the Postpartum Hospitalization Affect Postpartum Visit Adherence?

By Rebecca H. Allen, MD, MPH, Editor

SYNOPSIS: In this retrospective cohort study of 1,015 women at one institution, there was no association between type of contraceptive prescribed immediately postpartum and attendance at the postpartum visit.

SOURCE: Chiruvella M, Schaffir J, Benedict JA, et al. Is provision of contraception at discharge following delivery associated with postpartum visit attendance? *Contraception* 2021;103:103-106.

The postpartum period, often called the fourth trimester, is an opportunity to provide patients with important healthcare interventions after delivery. Therefore, it is critical to examine any factors that may either promote or decrease patient engagement with postpartum care.

This was a retrospective cohort study conducted at the Ohio State University Wexner Medical Center in 2013. Women were included if they had two or more regular prenatal visits, a pregnancy lasting 24 weeks or more, and at least one visit to any department in the health system after delivery. The provision of

contraception upon hospital discharge after delivery was categorized into four groups: sterilization, depot medroxyprogesterone acetate (DMPA) injection or etonogestrel implant insertion as an inpatient, prescriptions for hormonal contraception, and no contraception. At the time, postplacental intrauterine device (IUD) insertion was not an option at this institution. The primary outcome was any postpartum visit attendance within 90 days of delivery.

Of the 1,015 women identified, 128 (12.6%) were prescribed hormonal contraception, 296 (29.6%) were given DMPA or an implant, 134 (13.2%) underwent sterilization, and 457 (45%) did not receive any contraception. Patients in the sterilization group were more likely to be older, to be of higher parity, and to have delivered by cesarean compared to the other groups. A total of 333 (33%) patients attended a postpartum visit. After controlling for age, race/ethnicity, parity, insurance status, smoking status during pregnancy, and history of substance abuse, there was no difference in postpartum visit attendance by type of contraception prescribed at discharge.

■ COMMENTARY

The American College of Obstetricians and Gynecologists (ACOG) released guidelines recently outlining ways to improve postpartum care for patients.[1] They recommend that the timing of the comprehensive postpartum visit should be individualized and patient-centered, but that, ideally, the patient should be seen within the first three weeks postpartum and then at least one more time prior to 12 weeks postpartum. The comprehensive postpartum visit should include a full assessment of physical, social, and psychological well-being, including contraceptive options. The postpartum care plan also should include a discussion of the infant feeding plan, management of pregnancy complications and postpartum problems, and treatment plans for ongoing chronic health conditions.

Many factors affect postpartum visit attendance. Barriers may include cost, transportation, childcare responsibilities, and a lack of perceived benefit to the visit.[2] Depending on the population, as much as 40% of women fail to attend the postpartum visit.[1] Increasing engagement with postpartum care is important, and strategies have included discussing the importance of postpartum care during prenatal visits, scheduling the visit during prenatal care so that the appointment already is on the patient's calendar, and using postpartum nurses and other reminders to encourage postpartum follow-up.

During the postpartum hospital stay, most patients are counseled regarding contraception, and methods are provided, if desired. Some women are offered a short-term bridge method until their postpartum visit, such as the progestin-only pill, with the idea that they may be incentivized to return for more effective contraceptive methods, e.g., the intrauterine device (IUD) or implant. The authors of this study did not find that the provision of any type of contraceptive, or even the provision of no contraceptive method, influenced postpartum visit attendance rates. The study is limited to a single institution in the Midwest and the findings may not be generalizable, especially given the very low rate of postpartum visit adherence (33%).

[Many factors affect postpartum visit attendance. Barriers may include cost, transportation, childcare responsibilities, and a lack of perceived benefit to the visit.]

Postpartum contraception is important for reproductive life planning and birth spacing. ACOG recommends that women avoid interpregnancy intervals shorter than six months and, ideally, 18 months should be the minimum.[1] Rapid repeat pregnancies often are unintended or mistimed, and studies have shown that the postpartum contraceptive method chosen influences the rate of this outcome. Investigators at one large hospital in Pennsylvania reported that rapid repeat pregnancy occurred in 27% of their population and the risk was 2.5 times higher among women who did not use IUDs and implants in the postpartum period.[3]

Another study of women in the U.S. military demonstrated a short interdelivery interval rate of 17%, with rates varying according to postpartum contraceptive method used: 1% with sterilization; 6% with IUD/implant; 12% with DMPA; 21% with pill, patch, or ring; and 23% with no prescription for contraception.[4] Therefore, using shared decision-making with patients and incorporating their future pregnancy intentions in selecting a postpartum contraceptive method is important. ■

REFERENCES

1. The American College of Obstetricians and Gynecologists. Optimizing Postpartum Care. Published May 2018. https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2018/05/optimizing-postpartum-care
2. Henderson V, Stumbras K, Caskey R, et al. Understanding factors associated with postpartum visit attendance and contraception choices: Listening to low-income postpartum women and health care providers. *Matern Child Health J* 2016;20:132-143.
3. Sackeim MG, Gurney EP, Koelper N, et al. Effect of contraceptive choice on rapid repeat pregnancy. *Contraception* 2019;99:184-186.
4. Brunson MR, Klein DA, Olsen CH, et al. Postpartum contraception: Initiation and effectiveness in a large universal healthcare system. *Am J Obstet Gynecol* 2017;217:55.e1-55.e9.

CME/CE INSTRUCTIONS

To earn credit for this activity, please follow these instructions:

1. Read and study the activity, using the provided references for further research.
2. Log on to ReliasMedia.com and click on My Account. First-time users must register on the site using the eight-digit subscriber number printed on your mailing label, invoice, or renewal notice.
3. Pass the online test with a score of 100%; you will be allowed to answer the questions as many times as needed to achieve a score of 100%. Tests are taken with each issue.
4. After completing the test, a credit letter will be emailed to you instantly.
5. Twice yearly after the test, your browser will be directed to an activity evaluation form, which must be completed to receive your credit letter.

CME/CE OBJECTIVES

Upon completion of this educational activity, participants should be able to:

- Explain the latest data regarding diagnosis and treatment of various diseases affecting women;
- Discuss new data concerning prenatal care, neonatal health, and complications arising in pregnancy and the perinatal period; and
- Discuss the advantages, disadvantages, and cost-effectiveness of new testing procedures in women's health.

CME/CE QUESTIONS

1. **Which of the following statements regarding psychostimulant use in pregnancy for the treatment of perinatal attention-deficit hyperactivity disorder (ADHD) is true?**
   a. Psychostimulants have been well studied and are not associated with any adverse obstetric, maternal, or fetal adverse outcomes.
   b. Untreated ADHD in pregnancy is associated with increased rates of postpartum depression and anxiety.
   c. Studies have shown that behavioral interventions for perinatal ADHD are ineffective.
   d. Untreated ADHD in pregnancy, as opposed to untreated depression, has not been associated with adverse long-term neurobehavioral outcomes in the neonate.
2. **In the study by Rezniczek et al, which of the following was associated with loop electrosurgical excision procedure conization of the cervix under local anesthesia?**
   a. Larger cone volumes
   b. Decreased blood loss
   c. Less fragmentation
   d. Lower rate of positive margins
3. **According to the study by Margolis et al, using a restrictive policy for discharge opioid prescriptions following gynecologic abdominal surgery:**
   a. leads to increased post-discharge calls to the office requesting opioid prescriptions.
   b. contributes to patients seeking opioids from illicit sources.
   c. does not negatively affect patient perception of their post-discharge pain control.
   d. likely will precipitate a worsening of the opioid crisis.
4. **In the study by Chiruvella et al, which factor was associated with postpartum visit attendance?**
   a. Postpartum sterilization
   b. Parity
   c. Hormonal contraception prescription
   d. None of the above

[IN FUTURE ISSUES]

The Levonorgestrel IUD Is Similarly Effective as the Copper IUD for Emergency Contraception