"UPDATE ON TECHNOLOGY: VESSEL-SEALING DEVICES" BARBARA S. LEVY, MD (SEPTEMBER)

New technology offers more than convenience

I commend Dr. Levy for highlighting energy-delivery systems for gynecologic surgeons. I have adopted Liga-Sure V for all of my Gyn cases—both laparoscopic and open—because of the convenience and safety of bipolar devices for coagulation and cutting.

Not all members of my department have adopted energy-delivery systems, however. Some faculty members still ligate vessels the traditional way (i.e., hand-tying knots), eschewing modern technology. This can lead to increased time in the OR trying to achieve hemostasis. It also can increase the likelihood that the patient will need a blood transfusion as a result of unnecessary blood loss. It can also lead to longer hospitalization and related complications such as deep venous thrombosis and nosocomial pneumonia.

If the faculty member is a role model for resident physicians, all the more reason to adopt the new technology—or residents will be deprived of opportunities to learn it. We coach our residents to practice evidence-based medicine; if we do not practice it on our own, why should they? I urge all gynecologic surgeons to adopt new energy-delivery systems in your practice.

> Takeko Takeshige, DO New York, NY

"IS THE EVIDENCE ON WATER BIRTH JUST TOO MURKY?" JANELLE YATES (AUGUST)

Review of data on water birth was biased

I found the summary of the evidence of the dangers and safety of water birth to be purposely skewed toward



findings of dangers, while ignoring the wealth of evidence supporting its safety. The author quoted the 2009 Cochrane review and accurately included the conclusion that water immersion during labor reduces the use of analgesia, but skipped right over the evidence of lack of danger to the newborn. That evidence includes no differences in Apgar score, NICU admission, or neonatal infection rate between infants born in water and those born on land.¹

The author then goes on to focus on the opinion of a nonpracticing ObGyn blogger who has some very strong opinions on controversial topics who touts an obscure article about culturing the water in birth pools before delivery. Conveniently omitted is the fact that the researchers were actually supportive of water labor.

She took the ObGyn blogger's opinion at face value and distorted the conclusions of the researchers. This kind of editorializing is misleading to your reading public and is also dishonest and unethical. Even a cursory glance at the articles available on PubMed reveals that numerous observational studies have demonstrated the safety and efficacy of water immersion during labor and birth. See, for example, Geissbuehler and associates^{2,3} and Cluett and colleagues.⁴

The "review" was biased and uninformed; the purpose of the article was clearly to cast water immersion during labor and birth as a dirty and dangerous practice.

> Samantha McCormick, CNM, ARNP Cape Coral, Fla

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>> Ms. Yates responds: Lack of randomized trials means safety of water birth has not been proved

In assessing the published data, I faced an insurmountable challenge: the lack of any randomized, controlled trials of birth in water (though there have been a couple of labor in water). That leaves a fairly sizeable collection of case reports and other observational data. I chose not to skip over the risks described in this literature, assuming that the reader would prefer to be informed of their possibility rather than falsely reassured of the absolute safety of water birth.

The Cochrane review¹ that I cited was able to confirm the safety of water immersion only during the first stage of labor, as I stated. In regard to actual birth in water, it pointed to a lack of data, noting the fact that only two trials have evaluated immersion of women in water during the second stage of labor, and none during the third stage. It furComment & Controversy

ther observed: "A lack of data for some comparisons prevented robust conclusions." After these equivocations, the reviewers stated that there is "no evidence of increased adverse effects to the fetus/ neonate or woman from labouring in water or waterbirth." That is hardly a wholesale endorsement of the practice of water birth. In fact, the review also observed: "The fact that use of water immersion in labour and birth is now a widely available care option for women threatens the feasibility of a large, multicentre randomized controlled trial."

The "blogger" whom Ms. McCormick mentions is Amy Tuteur, MD. She served as a clinical instructor of obstetrics and gynecology at Harvard Medical School and is the author of How Your Baby is Born (Ziff-Davis, 1994). Her interpretation of published data, therefore, merited discussion.

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"ARE STAPLES OR SUTURES BETTER FOR CLOSING THE SKIN AT CESAREAN DELIVERY?" AARON B. CAUGHEY, MD, PHD (EXAMINING THE EVIDENCE, JULY)

Study overlooked the best skin-closure method

I read Dr. Caughey's commentary on the study of sutures versus staples for skin closure at cesarean delivery with much interest. However, I was disappointed that the material that produces the most attractive closure, that is easiest to place, and that causes the least amount of pain was not included in the study. The material I am speaking of is 3-0 Prolene suture. Instead, the study focused on 4-0 Monocryl suture versus staples.

Prolene is placed in the same manner as Monocryl. Aside from that, there are no similarities between the two. Prolene is removed



at the same time that skin staples would be removed, but it takes a fraction of the time, and produces much less pain. Monocryl is often blamed for chronic incisional scarring and pain—not so, Prolene.

I find the 3-0 Prolene as easy to place as Monocryl. It may take a bit longer than staples to close the skin, but it offers a more aesthetically pleasing operative-site closure.

> Jonathan A. Fisch, MD Indianapolis, Ind

"INTRAUTERINE CONTRACEPTION: PATIENT AND CLINICIAN CONSIDERATIONS"

LEE SHULMAN, MD, HENRY M. HESS, MD, PHD, RAQUEL ARIAS, MD, ANDREW LONDON, MD, MBA, AND SUSAN WYSOCKI, RN (SUPPLEMENT; JULY)

Aren't intrauterine contraceptives abortifacients?

I question the statement, in this supplement to OBG MANAGEMENT, that the mechanism of action of intrauterine contraceptives is spermicidal. This implies that an intrauterine device (IUD) is not an abortifacient. Yet, the 2009 edition of *The Physicians' Desk Reference* describes the "possible mechanism(s) by which copper enhances contraception efficacy, [which] include interference with sperm transport or fertilization, and prevention of implantation."

I am a believer in a woman's right to choose. However, I believe that the statement that intrauterine contraceptives are spermicidal is, at best, begging the question of accuracy.

> Robert S. Ellison, MD Covina, Calif

>> Dr. Shulman responds: Data strongly refute the claim that the IUD is abortifacient

Dr. Ellison is correct about the description of the mechanism of action of intrauterine contraceptives found in the PDR. This description also appears on the package inserts of the two commercially available IUDs, in recognition of the fact that they can prevent pregnancy by prefertilization and postfertilization mechanisms.

Numerous studies have been performed to ascertain the mechanism of action of the IUD. In a review of the literature, Ortiz and colleagues present the prevailing view that the IUD enhances the inflammatory response that helps to phagocytize sperm and interfere with sperm capacitation; they also argue that this is the primary basis for the prevention of pregnancy when an IUD is the method.¹

When an IUD is in place, a relatively small number of spermatozoa reach the distal segment of the fallopian tubes—and most of these spermatozoa are incapable of fertilization.² In one study involving the recovery of eggs, no fertilized eggs were recovered from the fallopian tubes and upper uterus of women who had an IUD in place. In contrast, more than 50% of eggs were fertilized in women who used no contraception.³

It is for these reasons—and the absence of a rise in human chorionic gonadotropin in women who use the CONTINUED ON PAGE 15 *IUD*²—that intrauterine contraceptives are thought to prevent pregnancy primarily by spermicidal actions.

Perhaps two other issues need to be addressed:

• The fact that the IUD causes an inflammatory response in the uterus that can have an anti-implantation effect does not mean that this is a preeminent mechanism of action

• It is impossible to "prove a negative." The possibility that the IUD might prevent pregnancy through effects on implantation was the basis for including those statements in the original package inserts. Proving that the IUD doesn't prevent pregnancy by this mechanism is impossible.

Nonetheless, the available evidence is clear: The IUD prevents pregnancy by preventing conception, not by preventing implantation. Governmental agencies and medical societies have uniformly supported this premise. The publication in a package insert of a biologically plausible mechanism of action—a mechanism that has not been shown to be clinically relevant—says more about the continuing inadequacy of package inserts and the manner in which they are developed than it does about the abortifacient nature of the IUD.

The IUD is an important and vital option for women seeking safe and reliable methods, especially for those seeking a nonhormonal (Copper T380A) or nonoral (Copper T380A and levonorgestrelreleasing intrauterine system) method.

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"UPDATE ON MENOPAUSE"

ANDREW M. KAUNITZ, MD (MAY)

Why conserve the ovaries if they are likely to fail?

Dr. Kaunitz talks about the increased risk of cardiovascular death in women younger than 45 years who undergo oophorectomy but do not initiate hormone therapy. He recommends that the ovaries be spared at the time of hysterectomy, if at all possible. He does not mention a significant study that evaluated the time from hysterectomy to ovarian failure.¹ After hysterectomy, the ovarian vessels spasm, leading to an 84% decrease in ovarian perfusion. Twenty-five percent of ovaries fail within 6 months, and 40% fail within 3 years. I think this significant information should be taken into account along with the patient's age and pelvic pathology when considering whether or not to preserve the ovaries.

Steven Drosman, MD

Genesis Center for Clinical Research San Diego, Calif

Correction

In the October issue of OBG MANAGEMENT, the article entitled, "How to avert postoperative wound complication—and treat it when it occurs," by James D. Perkins, MD, and Roland A. Pattillo, MD, contained two errors:

- Dr. Pattillo was incorrectly identified as the author who practices at Mallory Community Health Center in Canton, Miss. It is Dr. Perkins who practices at the center, in addition to his posts at the University of Mississippi Medical Center in Jackson, Miss, and Morehouse School of Medicine in Atlanta.
- The fourth paragraph on page 51 should have said: "...use of electrocautery in the 'cutting current' mode when the abdomen is opened causes less tissue injury than 'coagulation current."

THESE ERRORS HAVE BEEN CORRECTED IN THE WEB VERSIONS OF THE ARTICLE.

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1. Siddle N, Sarrel P, Whitehead M. The effect of hysterectomy on the age at ovarian failure: identification of a subgroup of women with premature loss of ovarian function and literature review. Fertil Steril. 1987;47:94–100.

>> Dr. Kaunitz responds: Menopause may begin early in women who retain their ovaries at hysterectomy

Not all reports have confirmed the association,¹ but Dr. Drossman is correct: Onset of menopause appears to occur earlier in women who have undergone hysterectomy with ovarian conservation than it does in women whose uterus and ovaries are both intact.²⁻⁷

The clinical take-home points stemming from this observation are:

• Be proactive in the diagnosis of early menopause and use of estrogen therapy following hysterectomy in premenopausal women

• Counsel premenopausal women who are contemplating hysterectomy about the likelihood of early onset of menopause, including the probability that estrogen therapy will be recommended at that time.

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