External Cephalic Version

PREVENT THE FIRST CESAREAN

Stephen F Thung, MD, MSCI

Marriage, kids, and burnout

Maintaining ob/gyn excellence

LEGALLY SPEAKING

IUD blamed for miscarriages

DR LOCKWOOD’S TAKE

Cervical length
Who to screen

READERS REACT

Breast density laws: Debate continues
EDITORIAL BOARD

HAVE A QUESTION FOR THE BOARD? SEND IT TO US AT drlockwood@ubm.com

EDITOR IN CHIEF

CHARLES J LOCKWOOD, MD, MHCM
Senior Vice President, USF Health
Dean, Morsani College of Medicine
University of South Florida
TAMPA, FL

DEPUTY EDITOR

JON I EINARSSON, MD, PHD, MPH
Associate Professor of Obstetrics and Gynecology
Harvard Medical School
Director, Division of Minimally Invasive Gynecologic Surgery
Brigham and Women’s Hospital
BOSTON, MA

EDITORIAL BOARD

PAULA J ADAMS HILLARD, MD
Professor, Department of Obstetrics and Gynecology,
Chief, Division of Gynecologic Specialties
Stanford University School of Medicine
STANFORD, CA

JOHN O DELANCHEY, MD
Norman F Miller Professor of Gynecology, Director, Pelvic Floor Research, Group Director, Fellowship in Female Pelvic Medicine and Reconstructive Surgery
University of Michigan Medical School
ANN ARBOR, MI

CHRISTIAN PETTKER, MD
Associate Professor, Maternal-Fetal Medicine, Department of Obstetrics, Gynecology and Reproductive Sciences
Yale School of Medicine
NEW HAVEN, CT

ILANA CASS, MD
Vice Chair, Associate Clinical Professor, Department of Obstetrics and Gynecology
Cedars-Sinai Medical Center
LOS ANGELES, CA

SARAH J KILPATRICK, MD, PHD
Helping Hand Endowed Chair, Department of Obstetrics and Gynecology
Cedars-Sinai Medical Center
LOS ANGELES, CA

SHARON T PHELAN, MD
Professor, Department of Obstetrics and Gynecology
University of New Mexico
ALBUQUERQUE, NM

JOSEPH A COPEL, MD
Professor, Obstetrics, Gynecology, and Reproductive Sciences, and Pediatrics
Yale School of Medicine
NEW HAVEN, CT

STEVEN J ORY, MD
Executive Associate Dean for Academic Affairs, Professor of Obstetrics and Gynecology, and Human and Molecular Genetics
Florida International University College of Medicine
MIAMI, FL

JOE LEIGH SIMPSON, MD
Executive Associate Dean for Academic Affairs, Professor of Obstetrics and Gynecology, and Human and Molecular Genetics
Florida International University College of Medicine
MIAMI, FL

PAULA J ADAMS HILLARD, MD
Professor, Department of Obstetrics and Gynecology, Chief, Division of Gynecologic Specialties
Stanford University School of Medicine
STANFORD, CA

Ilana Cass, MD
Vice Chair, Associate Clinical Professor, Department of Obstetrics and Gynecology
Cedars-Sinai Medical Center
LOS ANGELES, CA

Joshua A Cope, MD
Professor, Obstetrics, Gynecology, and Reproductive Sciences, and Pediatrics
Yale School of Medicine
NEW HAVEN, CT

Steven J Ory, MD
Professor of Obstetrics and Gynecology
Florida International University
MIAMI, FL

John Q Delaney, MD
Norman F Miller Professor of Gynecology, Director, Pelvic Floor Research, Group Director, Fellowship in Female Pelvic Medicine and Reconstructive Surgery
University of Michigan Medical School
ANN ARBOR, MI

Founding Editor

JOHN T QUEENAN, MD
Professor and Chair Emeritus, Department of Obstetrics and Gynecology
Georgetown University School of Medicine
WASHINGTON, DC

Reprint Services
877-852-5295 ext. 121  bkolb@wrightsmedia.com  Outside US, UK, direct dial:  281-419-5725, Ext. 121

CONTENT
Sara Michael
VP, Content & Strategy
Teresa McNulty
Group Content Director
Judith Orvos
Editorial Consultant
Susan C Olmstead
Editorial Director
440-891-2704, susan.olmstead@ubm.com

Miranda Hester
Content Specialist
Nancy Bitteker
Director, Design and Digital Production
Nicole Davis-Slocum
Art Director

SALES & MARKETING
Georgiann DeCenzo
Executive Vice President, Managing Director
Ken Sylvia
VP Group Publisher
Aviva Belsky
Group Publisher
732-346-3044, aviva.belsky@ubm.com
Alison O’Connor
Associate Publisher
732-346-3075, alison.oconnor@ubm.com

Joanna Shippoli
Account Manager, Recruitment Advertising
440-891-2615, joanna.shippoli@ubm.com
Renee Schuster
List Account Executive
440-891-2613, renee.schuster@ubm.com
Maureen Cannon
Permissions/International Licensing
440-891-2742, maureen.cannon@ubm.com

MAY 2017
2 CONTEMPORARYOBGYN.NET
LabCorp is with you and your patient through each step of the pregnancy continuum. Advancements in science have brought to obstetric care a new battery of tests — from preconception test options to tests that are available in each trimester. LabCorp is your one-source laboratory solution.

Tests She Needs - from preconception to delivery
- Noninvasive prenatal test options
- Genetic testing for inherited disorders
- Carrier screening
- Infectious disease screening
- Hormone test options with extensive age-related reference intervals

Services You Expect - from patient encounter to follow-up
- Scientific expertise
- Genetic counselors
- Patient information and counseling reports
- Patient portal
- Online appointments for blood draws at LabCorp collection sites
- EMR interface solutions

For more information about LabCorp tests and services, visit www.labcorp.com.
Let us know what you think. Email us at susan.olmstead@ubm.com

MAY 2017
VOLUME 62 | NUMBER 05

IN THIS ISSUE

20 PEER-REVIEWED
Pregnancy in the setting of VWD
ANDRA H JAMES, MD, MPH
A common but underdiagnosed disorder, von Willenbrand disease may manifest during bleeding challenges of menstruation and childbirth.

26 PEER-REVIEWED
External cephalic version
STEPHEN F THUNG, MD, MSCI

30 PEER-REVIEWED
Early pregnancy failure
LAUREN HIBLER CARLOS, MD, OLGA GRECHUKHINA, MD, AND ANNA K SFAKIANAKI, MD
Fifteen percent of pregnancies end before 13 weeks. Experts review how to manage early loss and oversee recovery. Part 2 of 2

34 FIRST PERSON
Ob/gyn excellence
As the US healthcare system faces serious challenges, leaders in ob/gyn issue a call to action and solutions for maintaining excellence in the field. Part 2 of 2

40 TOOLS TEST DRIVE
JAMES GREENBERG, MD
A test drive of 3 products for ob/gyns and patients.

53 LEGALLY SPEAKING
DAWN COLLINS, JD
An IUD is blamed for multiple miscarriages.

61 DR LOCKWOOD’S TAKE
CHARLES J LOCKWOOD, MD, MHCM
Should we screen for shortened cervix?

64 READERS REACT

18 DON'T FORGET TO CHECK OUT OUR APP FOR APPLE AND ANDROID DEVICES!

CONTEMPORARY OB/GYN, Print ISSN#0090-3159, Digital ISSN#2150-6264, is published monthly by UBM Medica 131 West First St, Duluth, MN 55806-2065. One-year subscription rates: $110.00 per year (USA and Possessions); $140.00 per year (elsewhere). Single copies (prepaid only) $12.00 in the USA; $18.00 per copy elsewhere. Include $6.50 per order plus $2.00 for US postage and handling.

UBM Medica provides certain customer contact data (such as customers’ names, addresses, phone numbers, and e-mail addresses) to third parties who wish to promote relevant products, services, and other opportunities that may be of interest to you. If you do not want UBM Medica to make your contact information available to third parties for marketing purposes, simply call toll-free 996-929-2932 between the hours of 7:30 a.m. and 5:00 p.m. CST and a customer service representative will assist you in removing your name from UBM Medica’s lists. Outside the U.S. please phone 218-740-6477.

CONTEMPORARY OB/GYN does not verify any claims or other information appearing in any of the advertisements contained in the publication, and cannot take responsibility for any losses or other damages incurred by readers in reliance of such content.

To subscribe, call toll-free 888-527-7008. Outside the U.S. call 218-740-6477.

ILLUSTRATION BY ALEX BAKER, DNA ILLUSTRATIONS, INC.

OUR MISSION
For nearly a half century, busy practitioners have trusted Contemporary OB/GYN to translate the latest research into outstanding patient care. We are dedicated to providing them with evidence-based information on scientific advances in a clinically useful format.

CONTEMPORARY OB/GYN NET
PATIENTS WANT TO KNOW.
RESULTS YOU CAN TRUST.

Choose Harmony, the NIPT with a proven record

- Validated in the average and high-risk population\(^1\)\(^3\)
- ACOG/SMFM state any patient may choose cell-free DNA (cfDNA) analysis as a screening strategy for common aneuploidies regardless of her risk status\(^2\)
- In a NEJM study, Harmony had a false positive rate of 0.06% for trisomy 21 in over 15,000 pregnant women\(^1\)

For more information, please visit www.harmonytestusa.com

The Harmony Prenatal Test was developed by Ariosa Diagnostics, a CLIA-certified laboratory. As with other lab-developed tests, it has not been cleared or approved by the FDA and is not available for sale as an IVD in the US. Non-invasive prenatal testing (NIPT) based on cell-free DNA analysis is not diagnostic; results should be confirmed by diagnostic testing.


HARMONY is a trademark of Roche.
©2017 Roche. PP-US-10539-0417
Should we screen for shortened cervix?

It’s important to identify patients who will benefit most from screening.

Preterm birth (PTB) remains a serious global threat to children’s health. In the United States, factors closely linked with PTB (ie, low birth weight, respiratory distress, and neonatal hemorrhage) account for the plurality of infant deaths. Thus, there is an urgent need to find and implement interventions that can reduce this public health threat.

In 2001, Iams and associates demonstrated that among low-risk pregnant women, transvaginal sonographic detection of a shortened cervical length (≤25 mm) or the presence of vaginal fetal fibronectin (fFN) ≥ 50 ng/ml at 22 to 24 weeks’ gestation was associated with significantly increased risk for PTB <35 weeks with a relative risk of 6.9; 95%CI 4.3–11.1, and 8.2; 95%CI: 4.8–13.9, respectively. Nevertheless, as both tests had low sensitivities for the detection of women at risk (39.1% and 23.4%, respectively), and given the absence of an effective preventative treatment, no rationale existed to use either modality to screen low-risk populations.

However, subsequent studies suggesting that vaginal progesterone reduced PTB risk in women with shortened cervices led to rethinking of the value of cervical length screening. Leading experts have now argued that universal screening is justified because transvaginal ultrasound cervical length determinations effectively screen for PTB, an important adverse outcome, and vaginal progesterone is an effective preventative treatment. Major professional societies, while stopping short of endorsing universal cervical length screening in low-risk women, have encouraged such an approach. For example, the Society for Maternal-Fetal Medicine stated in a recent consensus clinical guideline that “implementation of such a screening strategy can be viewed as reasonable, and can be considered by individual practitioners.”

While the American College of Obstetricians and Gynecologists Practice Bulletin Prediction and Prevention of Preterm Birth did not call for universal cervical length screening, it argued that “this screening strategy may be considered.” However, a recent study by Esplin and associates has brought momentum toward universal cervical length screening to a screeching halt.

**Does screening accurately predict PTB in low-risk populations?**

The Esplin et al. study was a derivative of the Eunice Kennedy Shriver National Institute of Child Health and Human Development Nulliparous Pregnancy Outcomes Study: Monitoring Mothers-to-Be (nuMoM2b). This prospective cohort study of nulliparous women with singleton pregnancies followed 9469 women with 3 study visits about 4 weeks apart. Quantitative vaginal fFN studies were obtained at between 6 and 15 weeks, while both fFN and transvaginal cervical length determinations were made at 16–23 and 22–31 weeks.
The primary outcome was spontaneous PTB <37 weeks. The fFN samplings were self-administered. Women were informed of any cervical length measurement <15 mm, and their clinician could opt to treat them with vaginal progesterone. Of the original cohort, 477 (5%) had spontaneous PTBs and 8992 experienced either term birth or nonspontaneous PTB. The population was broadly reflective of the United States, composed of 60.7% non-Hispanic whites, 13.8% non-Hispanic blacks, 16.5% Hispanics, and 4.0% Asian-Americans.

A transvaginal sonographic cervical length ≤25 mm was present in 8.0% of women with subsequent spontaneous PTB <37 weeks at visit 2, and 23.3% at visit 3. A fFN value ≥50 ng/mL was present in 21.2% of women with spontaneous PTB at visit 1, 7.3% at visit 2, and 8.1% at visit 3. A cervical length value ≤25 at the third visit had the highest sensitivity (23.3%; 95% CI: 19.2–27.5) for predicting PTB <37 weeks with corresponding specificity of 93.6% (95%CI: 93.1–94.1).

The highest sensitivity (34.5%; 95% CI: 30.0–39.1) for fFN was a value ≥10 ng/mL at the first visit, but corresponding specificity was low (74.1%; 95% CI: 73.2–75.1). Area-under-the-curve (AUC) values for the receiver-operator characteristic (ROC) analysis, a measure of test accuracy, were low at visit 3 for cervical length (0.67; 95% CI: 0.64–0.70), fFN (0.59; 95% CI: 0.56–0.62) and their combination (0.67; 95% CI: 0.64–0.70). Seven hundred forty-two women (8.0%) had cervical length ≤25 mm at visit 2 or 3, and 66 of them (8.9%) received progesterone therapy after 16 weeks. However, AUC values for cervical length did not change appreciably following post hoc sensitivity analysis in which women treated with progesterone were considered to have had a spontaneous PTB.

The authors concluded, “among nulliparous women with singleton pregnancies, quantitative vaginal fetal fibronectin and serial transvaginal ultrasound cervical length had low predictive accuracy for spontaneous preterm birth. These findings do not support routine use of these tests in such women.”

New questions about progesterone
While the study by Esplin et al. raises serious concerns about the efficacy of cervical length screening in low-risk populations, there are also growing concerns about the primary rationale for such screening—ie, the efficacy of progesterone prophylaxis in preventing PTB. Nelson and associates conducted a recent prospective cohort study of 17 alpha hydroxyprogesterone caproate (17OHP) to determine whether such treatment reduced recurrent PTB ≤35 weeks for an entire study cohort compared to a historical referent rate.

Of the 430 consecutive women with...
prior PTB ≤35 weeks treated with 17OHP, the overall recurrence of PTB was 25% (N = 106) compared with an expected rate of 16.8% (P = 1.0). In addition, plasma 17OHP concentrations were not different between women who delivered ≤35 weeks versus those who delivered later in pregnancy. However, treated women did have higher rates of gestational diabetes (13.4% vs 8%; P = .001).

In the OPPTIMUM study, Norman and colleagues conducted a large, double-blind, randomized, placebo-controlled trial of vaginal progesterone (200 mg) daily from 22–24 to 34 weeks among women deemed high risk because of a previous spontaneous PTB ≤34 weeks, a cervical length ≤25 mm, or a positive fFN combined with other clinical risk factors.10 The authors found progesterone had no significant effect on fetal death or PTB <34 weeks (odds ratio adjusted for multiple comparisons of 0.86; 95% CI: 0.61–1.22) nor on associated adverse neonatal outcomes (OR 0.62; 95% CI: 0.38–1.03).

While this study has been subject to various criticisms, including being underpowered to rule out effects among the various patient risk subgroups, it adds to growing concerns that progesterone therapy may not be as efficacious as first believed. Beyond these disappointing clinical trial results, growing translational research calls into question the biological plausibility of progesterone treatment. Patients with abruption and infection-associated PTB display significantly reduced progesterone receptor (PR) expression in their decidual cells, suggesting that they would be relatively unresponsive to increased circulating levels of progesterone.11,12

We are also gaining new insights into the role of inflammation-associated phosphorylation of the myome-trial cell PR-A isoform, which may render it antagonist to the anti-parturition effect of the PR-B isoform.13 This further calls into question the logic behind progesterone treatment, since additional steroid would only exacerbate this paradoxical anti-PR effect.13 Finally, given that the high levels of unbound (≥10%) endogenous progesterone in maternal circulation in the third trimester (at least 32.0 to 63.5 nM)14 far exceed the KD of the PR (0.5 to 1.0 nM)15, one must question the pharmacological rationale for exogenous progesterone therapy.

**Take-home message**

So how should we interpret these recent studies and how should they affect our practices? First, universal transvaginal cervical length screening is not justified in low-risk obstetrical populations. Second, it is still not clear whether vaginal progesterone prevents PTB in women at risk, and if it does, which subgroups of women benefit. From a practical perspective, if patients undergoing routine ultrasound are incidentally found to have a short cervix at mid-gestation, given its possible efficacy, it still seems reasonable to initiate vaginal progesterone but patients should be aware that its efficacy remains unproven and there may be an increased risk of gestational diabetes.

Certainly, additional clinical and translational research is badly needed to: 1) identify screening tests with higher sensitivity and specificity for the detection of low-risk patients at risk for PTB (eg, characteristic microbiomes, genetic markers, early evidence of genital tract inflammation); 2) identify subsets of patients, if any, who are likely to benefit from progesterone therapy; and 3) identify agents capable of restoring decidual, myometrial and cervical PR-B levels or activity.

---

Dr Lockwood, editor in chief, is Senior Vice President, USF Health, and Dean, Morsani College of Medicine, University of South Florida, Tampa. He can be reached at DrLockwood@ubm.com.

**ADDITIONAL CLINICAL AND TRANSLATIONAL RESEARCH IS BADLY NEEDED.**

**For references visit contemporaryobgyn.net/cervical-length**

---

**Read part 2 of our series on early pregnancy failure on PAGE 30.**

---

8 CONTEMPORARYOBGYN.NET MAY 2017
Severe maternal morbidity affects over 60,000 women each year

Every 10 minutes a woman in the US nearly dies of pregnancy-related complications

**Methylergonovine Maleate Tablets**

**Brief Summary:** Consult Full Prescribing Information for complete product information.

**INDICATIONS AND USAGES**

Methylergonovine Maleate is a semi-synthetic ergot alkaloid used for the prevention and control of postpartum hemorrhage. It is used following delivery of placenta, for routine management of uterine atony, hemorrhage, and subinvolution of the uterus as well as for control of uterine hemorrhage in the second stage of labor following delivery of the anterior shoulder.

**CONTRAINDICATIONS**

Hypertension, toxemia, pregnancy, and hypersensitivity are contraindications to Methylergonovine Maleate Tablets.

**WARNINGS**

**General:** This drug should not be administered intravenously routinely because of the possibility of inducing sudden hypertensive and cerebrovascular accidents. If intravenous administration is considered essential as a lifesaving measure, methylergonovine maleate should be given slowly over a period of no less than 60 seconds with careful monitoring of blood pressure. Intra-arterial or periarterial injection should be strictly avoided. Caution should be exercised in presence of impaired hepatic or renal function.

**Breast-Feeding:** Mothers should not breast-feed during treatment with Methylergonovine Maleate Tablets, USP. Milk secreted during this period should be discarded. Methylergonovine Maleate Tablets, USP may produce adverse effects in the breast-feeding infant. Methylergonovine Maleate Tablets, USP may also reduce the yield of breast milk. Mothers should wait at least 12 hours after administration of the last dose of Methylergonovine Maleate Tablets, USP before initiating or resuming breast-feeding.

**Coronary Artery Disease:** Patients with coronary artery disease or risk factors for coronary artery disease (e.g., smoking, obesity, diabetes, high cholesterol) may be more susceptible to developing myocardial ischemia and infarction associated with methylergonovine-induced vasospasm.

**Medication Errors:** Inadvertent administration of Methylergonovine Maleate Tablets, USP to newborn infants has been reported. In these cases of inadvertent neonatal exposure, symptoms such as respiratory depression, convulsions, cyanosis, and oliguria have been reported. Usual treatment is symptomatic. However, in severe cases, respiratory and cardiovascular support is required. Methylergonovine Maleate Tablets, USP has been administered instead of vitamin K and Hepatitis B vaccine, medications which are routinely administered to the newborn. Due to the potential for accidental neonatal exposure, methylergonovine maleate should be stored separately from medications intended for neonatal administration.
PRECAUTIONS

General: Caution should be exercised in the presence of sepsis, obliterative vascular disease. Also use with caution during the second stage of labor. The necessity for manual removal of a retained placenta should occur only rarely with proper technique and adequate allowance of time for its spontaneous separation.

Drug Interactions

CYP3A4 Inhibitors (e.g., Macrolide Antibiotics and Protease Inhibitors): There have been rare reports of serious adverse events in connection with the coadministration of certain ergot alkaloid drugs (e.g., dihydroergotamine and ergotamine) and potent CYP3A4 inhibitors, resulting in vasoconstriction leading to cerebral ischemia and/or ischemia of the extremities. Although there have been no reports of such interactions with methylergonovine alone, potent CYP3A4 inhibitors should not be coadministered with methylergonovine. Examples of some of the more potent CYP3A4 inhibitors include macrolide antibiotics (e.g., erythromycin, troleandomycin, clarithromycin), HIV protease or reverse transcriptase inhibitors (e.g., ritonavir, indinavir, nelfinavir, delavirdine) or azole antifungals (e.g., ketoconazole, itraconazole, voriconazole). Less potent CYP3A4 inhibitors should be administered with caution. Less potent inhibitors include saquinavir, nefazodone, fluconazole, grapefruit juice, fluoxetine, fluvoxamine, zileuton, and clotrimazole. These lists are not exhaustive, and the prescriber should consider the effects on CYP3A4 of other agents being considered for concomitant use with methylergonovine.

CYP3A4 Inducers: Drugs (e.g. nevirapine, rifampicin) that are strong inducers of CYP3A4 are likely to decrease the pharmacological action of Methylergonovine Maleate Tablets, USP.

Beta-Blockers: Caution should be exercised when Methylergonovine Maleate Tablets, USP is used concurrently with beta-blockers. Concomitant administration with beta-blockers may enhance the vasoconstrictive action of ergot alkaloids.

Anesthetics: Anesthetics like halothan and methoxyflurane may reduce the oxytotic potency of Methylergonovine Maleate Tablets, USP.

Glyceryl Trinitrate and Other Antianginal Drugs: Methylergonovine maleate produces vasoconstriction and can be expected to reduce the effect of glyceryl trinitrate and other antianginal drugs. No pharmacokinetic interactions involving other cytochrome P450 isoenzymes are known. Caution should be exercised when methylergonovine maleate is used concurrently with other vasoconstrictors, ergot alkaloids, or prostaglandins.

Carcinogenesis, Mutagenesis, Impairment of Fertility: No long-term studies have been performed in animals to evaluate carcinogenic potential. The effect of the drug on mutagenesis or fertility has not been determined.

Pregnancy: Category C: Animal reproductive studies have not been conducted with methylergonovine maleate. It is also not known whether methylergonovine maleate can cause fetal harm or can affect reproductive capacity. Use of methylergonovine maleate is contraindicated during pregnancy because of its uterotonic effects. (See INDICATIONS AND USAGE).

Pediatric Use: Safety and effectiveness in pediatric patients have not been established.

Geriatric Use: Clinical studies of methylergonovine maleate did not include sufficient number of subjects aged 65 and over to determine whether they respond differently from younger subjects. In general, dose selection for an elderly patient should be cautious, usually starting at the low end of the dosing range, reflecting the greater frequency of decreased hepatic, renal, or cardiac function, and of concomitant disease or other drug therapy.

ADVERSE REACTIONS

The most common adverse reaction is hypertension associated in several cases with seizure and/or headache. Hypotension has also been reported. Abdominal pain (caused by uterine contractions), nausea and vomiting have occurred occasionally. Rarely observed reactions have included: acute myocardial infarction, transient chest pains, vasoconstriction, vasospasm, coronary arterial spasm, bradycardia, tachycardia, dyspnea, hematuria, thrombophlebitis, water intoxication, hallucinations, leg cramps, dizziness, tinnitus, nasal congestion, diarrhea, diaphoresis, palpitation, rash, and foul taste. There have been rare isolated reports of anaphylaxis, without a proven causal relationship to the drug product.

Nervous System Disorders: Cerebrovascular accident, paraesthesia.

Cardiac Disorders: Ventricular fibrillation, ventricular tachycardia, angina pectoris, atrioventricular block.

DRUG ABUSE AND DEPENDENCE

Methylergonovine maleate has not been associated with drug abuse or dependence of either a physical or psychological nature.

OVERDOSAGE

Symptoms of acute overdose may include: nausea, vomiting, abdominal pain, numbness, tingling of the extremities, rise in blood pressure, in severe cases followed by hypotension, respiratory depression, hypothermia, convulsions, and coma.

Because reports of overdosage with methylergonovine maleate are infrequent, the lethal dose in humans has not been established. The oral LD50 (in mg/kg) for the mouse is 187, the rat 93, and the rabbit 4.5. Several cases of accidental methylergonovine maleate injection in newborn infants have been reported, and in such cases 0.2 mg represents an overdose of great magnitude. However, recovery occurred in all but one case following a period of respiratory depression, hypothermia, hypertonicity with jerking movements, and convulsions.

Also, several children 1-3 years of age have accidentally ingested up to 10 tablets (2 mg) with no apparent ill effects. A postpartum patient took 4 tablets at one time in error and reported paresthesias and clamminess as her only symptoms.

Treatment of acute overdosage is symptomatic and includes the usual procedures: 1. Removal of offending drug by inducing emesis, gastric lavage, catharsis, and supportive diuresis. 2. Maintenance of adequate pulmonary ventilation, especially if convulsions or coma develop. 3. Correction of hypotension with pressor drugs as needed. 4. Control of convulsions with standard anticonvulsant agents. 5. Control of peripheral vasospasm with warmth to the extremities if needed.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch, or call 1-800-FDA-1088, or call Lupin Pharmaceuticals, Inc. at 1-800-399-2561.

Please note that this information is not comprehensive. Please see the full prescribing information at www.methergine.com.

Breast density laws: not in patients’ best interest

We read with interest the published response “Readers React: In defense of breast density notification laws” [March 2017 Contemporary OB/GYN] to our article “Breast density laws: Are you in compliance?” [December 2016 Contemporary OB/GYN].

In their letter, Dr Berg and Ms Pushkin strongly advocate for breast density notification laws. They discuss increased detection of breast cancer using MRI in high-risk women, such as those with BRCA mutations. They fail to mention, however, that no studies demonstrate earlier breast cancer detection or improved survival rates with additional breast imaging in the 50% of asymptomatic low-risk women who have increased density on screening mammography.

Their estimate of an out-of-pocket cost of $100–$125 in the 24 of 30 states with density laws not requiring insurance coverage is incongruent with our experience, in which the total cost of breast MRI ($2,400) or a breast ultrasound ($250) is most commonly the sole responsibility of the patient. As discussed in our article, 88% of women believe these laws to be economically discriminatory.

Additionally, they do not discuss the anxiety provoked in the 50% of women required by these laws to be notified that they have increased mammographic breast density, which may slightly increase their risk for breast cancer, and for which they are advised to discuss with their provider the option of additional breast imaging, but the cost most likely will not be covered by their health insurance.

Are breast density notification laws evidence based and in the best interests of our patients? As clearly outlined in our article, and in agreement with ACOG’s Committee Opinion 625, “Management of women with dense breasts diagnosed by mammography, 2015,” we do not believe so.

Jay Goldberg, MD, MSCP
Sara Mirghani, MD
Sarah Woodman, MD

The total cost of breast MRI ($2,400) or a breast ultrasound ($250) is most commonly the sole responsibility of the patient.
More pessary RTCs needed

Being an avid reader of *Contemporary OB/GYN*, I was disappointed to see the Women’s Health Update in the February issue report on “Cervical pessaries and preterm birth prevention.”

The short review of data presented at the Pregnancy Meeting of SMFM indicates once again that the use of a pessary for preterm delivery prevention is unproven. I certainly agree with that statement. Unfortunately, the data presented from superb clinician investigators at superb institutions should not be considered evidence to support or refute this statement.

The conclusions from this investigation cannot be considered scientifically valid. A power analysis was done to determine the number of patients needed to come to a conclusion that pessaries do not prevent preterm labor but the study was discontinued about half way through the proposed investigation. Therefore, the results, despite agreeing with previous reports, are from an inadequately powered study and should not be considered valid.

Only with adequately powered and statistically valid data should we come to any conclusions about the value of a new therapy. I am disappointed that this was presented (and a similarly underpowered study on pessaries for twin gestations) at SMFM and reported by *Contemporary OB/GYN*. It may give readers the impression that the study was valid and prevent them from enrolling their patients in ongoing, appropriately powered studies, that can definitively answer this question.

Arnold Cohen, MD
PHILADELPHIA, PENNSYLVANIA

IN REPLY

We thank Dr Cohen for his interest in our research on pessaries for prevention of spontaneous preterm birth (SPTB). We are happy he agrees with us that the use of pessary for prevention of SPTB is as of today still unproven.

Our randomized controlled trial (RCT), the fourth one published so far to evaluate this issue of pessary for prevention of SPTB in women with singleton gestations and a short transvaginal ultrasound (TVU) cervical length (CL), was underpowered, as we stated previously. We have also published a meta-analysis of the previously published 3 RCTs on this topic, which also showed no benefit from pessary for prevention of SPTB in this population. All together, 1662 women with singleton gestations and a short TVU CL have been randomized so far in the 4 published RCTs.

In both of our studies, we called for further RCTs. Indeed, at least another 10 RCTs enrolling several thousand women with singletons gestations and a short TVU CL evaluating pessary for prevention of SPTB are currently being conducted, with results of some of these studies being presented at SMFM and in the literature within the year.

An international prospective independent patient data meta-analysis is planned, which we hope will provide the power to perform a number of clinically relevant subgroup analyses including stratification by progesterone use and CL.

Vincenzo Berghella, MD
Lorraine Dugoff, MD
Jack Ludmir, MD

REFERENCES
Congratulations to longtime Contemporary OB/GYN Editorial Board member Haywood L. Brown, MD on his installment as the 68th president of ACOG.

We are confident that he will use this platform to continue to advance the cause of women’s healthcare in the United States and around the world.
Introducing Endosee—a truly innovative way to perform office hysteroscopy in any room, at any site

- An all-in-one, handheld, portable, cordless system for diagnostic hysteroscopy
- The flexible, thin (<5 mm) cannula has an integrated light source and camera, and provides excellent visualization
- Simple and quick to set up, requiring minimal staff training
- System includes a low-cost, reusable handset and an affordable, single-use cannula

www.endosee.com  800.243.2974  203.601.5200
simplifies: portability setup space cost visualization everything
Marriage, children burnout contributors

For women physicians, having a family may mean greater stress.

*by REBEKAH BERNARD, MD*

Women physicians have higher rates of burnout than their male counterparts, with increased levels of depression and suicide. Aside from the stressors of patient care, any discussion of burnout and women physicians must include the issue of role strain, in which women find themselves juggling professional life with the additional roles of spouse and mother.

This role strain causes a powerful conflict between responsibilities at work and at home, and is a particular issue for women physicians because they typically take on a much greater burden of household and childcare compared to their male colleagues.

For example, in one study of married physicians with children, 82% of men reported that “all or most” household duties were performed by their spouses, as opposed to only 5% of women physicians saying the same.1 In a study of pediatricians, women doctors performed 66% of child care and 63% of household duties, as compared to men who performed 19% of child care and 26% of household duties.2

And while this increase in burden on women physicians may be partly attributed to traditional societal gender roles, the reality is that most male physicians report having a stay-at-home spouse whose primary role is to provide for the household, with only 12% of their spouses working at full-time jobs, while nearly all of the partners of women physicians work full-time outside the home.

Without someone at home to manage the household responsibilities during the day, women physicians may find themselves spending their after-work hours completing the job of managing the home and children. This additional demand on women workers has been termed the “second shift,” and is a contributor to burnout.

Additionally, work/home conflict can be a major source of stress for women physicians. Women often report a sense of obligation to spend more time at home, and make greater accommodations to their work schedule in order to manage household

---

**QUICK TAKE**

- Women physicians need to protect themselves by planning ahead and obtaining a pre-nup well before the wedding day.
- Delegating household responsibilities and arranging for greater job flexibility can reduce the likelihood of burnout.

The Medical Economics’ blog section features contributions from members of the medical community. These blogs are an opportunity for bloggers to engage with readers about a topic that is top of mind, whether it is practice management, experiences with patients, the industry, medicine in general, or healthcare reform.

Rebekah Bernard, MD, is a family physician at Gulf Coast Direct Primary Care in Fort Myers, Florida.
tasks than men physicians, including making a career change to accommodate their spouse's career or child-raising responsibilities.\textsuperscript{2,3}

Women physicians also face strong feelings of guilt—when they are managing the home, they may worry about not being available to their patients. While at the office, women often feel guilty about missing time with their children. The role of being a mother can be so stressful that women physicians actually report the best mental health when their children turn 19—or in other words, leave home.\textsuperscript{4}

Adding the role of mother also increases the pressure on women physicians at work. Women with kids earn less than men—11\% less when married without children, plus another 14\% less if they have one child and 22\% less if they have more than one child.\textsuperscript{5} Women physicians in academia with children report decreased institutional support, including less secretarial support. These physicians published less and reported lower career satisfaction.\textsuperscript{6}

On top of that, really there is no "good" time for a physician to have a baby: pregnancy before, during, and after medical training each brings its own series of obstacles, including time off from education, social isolation, and the physical and emotional stress of work schedules.

During residency, women may face resentment from peers and supervisors who have to cover missed shifts due to pregnancy or childbearing related time off. If a woman chooses to wait until after training to have a baby, she may face difficulty in conceiving due to advancing maternal age or health issues, may be passed over for advancement on the job, and may face a conflict about taking time off for maternity leave, with many new moms reporting pressure to get back on the job sooner than they would prefer.

Faced with all of these challenges, some women in medicine are choosing to defer or avoid childbearing all together, with 25\% of women physicians reporting no children, compared to only 9\% of men doctors.

While choosing not to get married or have children is one approach to managing role strain, there are other options to maintain a healthy relationship and family:

1. Pick your partner carefully and get a prenuptial agreement. While no one enters into a marriage expecting to get divorced, the reality is that women physicians are at higher risk for divorce than men physicians, and the rate of divorce increases with the number of hours that women physicians work.\textsuperscript{7}
With a doctor’s potential for high earnings, many divorce attorneys see dollar signs when retained to represent a divorce involving a physician. Women physicians need to protect themselves by planning ahead and obtaining a pre-nup well before the wedding day. It’s not romantic, but it’s absolutely necessary.

**2 Communicate.**

Communication between women and their partners is essential to minimizing role strain. In particular, specifically defining roles and responsibilities—who does what around the house—has been shown to be helpful in reducing burnout in women, especially if done before children come into the picture.⁸

**3 Ask your partner for help—and accept it.**

It is important for women to clearly ask for help and to allow their partners to carry out responsibilities without micromanaging or getting frustrated that tasks aren’t accomplished “their way.” Many physician moms report that their child-raising stress actually decreased after divorce because their ex-husband then had the responsibility of caring for the children on designated days or weekends. If that type of role delegation happened during the marriage, instead of having to be mandated by a divorce court order, stress on women would likely improve.

**4 Use financial resources.**

Whenever possible, spend money to get the best help possible—whether that includes child care, house cleaning services, or take-out meals. Don’t feel guilty—think of it in terms of a value proposition. Physician time is best compensated when working as a physician, and by funding others to do non-physician work, we are contributing to employment and the economy.

Most importantly, by delegating non-physician work to others, women can spend free time on higher-quality interactions, such as time with family and friends and self-care.

**5 Ask for job flexibility and resources in the workplace.**

Physician burnout is strongly associated with a lack of control at work, and yet women physicians tend to have less control in the workplace than men do.⁹ Since burned-out physicians tend to leave the practice of medicine, it is in the best interest of both physicians and employers to give doctors more control over their schedules.

Women need to step up and ask for control over their work hours, as well as the necessary resources to do their job well. The American Medical Women’s Association has tips on how to best negotiate a flexible work schedule with your employer.

**6 Lower your self-expectations.**

This one might be the toughest of them all, but it is critically important to acknowledge that absolutely no one can do it all. Finding a good psychologist can help with letting go of the guilt of not being able to be the perfect doctor, wife, and mother, learning how to prioritize your time, practicing saying no before you feel overwhelmed, and making sure to take care of yourself so that you can take care of others.

---

**BY THE NUMBERS WOMEN EARN LESS THAN MEN**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11%</td>
<td>Less when married without children</td>
</tr>
<tr>
<td>14%</td>
<td>Less if they have one child</td>
</tr>
<tr>
<td>22%</td>
<td>Less if they have more than one child</td>
</tr>
</tbody>
</table>

---

For references visit contemporaryobgyn.net/marriage-kids
Vaginitis accounts for approximately 10 million office visits each year.¹ Most women will experience vaginitis symptoms.² Recurrence is common.³ This condition commands a great deal of your daily patient care time. You need a test with diagnostic accuracy to help treat patients properly on the first visit and help reduce recurrence.

Tests She Needs - Bacterial
The NuSwab Bacterial Vaginosis (BV) test:
• uses 3 quantitative organisms: Atopobium vaginae, BVAB-2, Megasphaera-1
• distinguishes normal flora from BV
• is 97% sensitive and 92% specific according to a published clinical study⁴

Tests She Needs - Fungal
The NuSwab C albicans and C glabrata test:
• targets the 2 most common Candida species
• helps guide treatment – C glabrata is often resistant to fluconazole⁵
• six species test options and add-on testing of 4 additional Candida species in refractory or recurrent cases

Tests She Needs - Parasitic
The NuSwab Trichomonas vaginalis (Tv) test:
• is 100% sensitive and 99% specific for Tv diagnosis⁶
• shown to be more sensitive than culture, microscopy, and Affirm® VPIII⁷
• can be used as a follow-up test to confirm negative wet mounts⁸


©2016 Laboratory Corporation of America® Holdings All rights reserved. 16094-1216
Affirm is a trademark of Becton, Dickinson, and Company.

For more information about LabCorp tests and services, visit www.labcorp.com.
Von Willebrand disease (VWD) is the most common inherited bleeding disorder. Approximately 90% of women being treated at hemophilia centers in the United States carry the diagnosis of VWD. Because women experience the hemostatic bleeding challenges of menstruation and childbirth, they are disproportionately affected by VWD.

Obstetricians and gynecologists may encounter women who have already been diagnosed or who have excessive reproductive tract bleeding and those patients should be evaluated for VWD. In his original 1926 paper, Finnish doctor Erik von Willebrand noted that women were twice as likely to be affected as men but while they are disproportionately affected by VWD, women are no more likely to inherit the condition than are men. In fact, with the exception of type 3 and type 2N VWD, which are autosomal recessive (homozygous or compound heterozygous), transmission of VWD is autosomal dominant.

**VWF and types of VWD**

VWD results from a deficiency of normal von Willebrand factor (VWF) due to insufficient or abnormal VWF. VWF is an elongated, multimeric protein (made up of multiple identical subunits) and has binding sites for platelets, collagen (in the subendothelium of blood vessels), and factor VIII (FVIII). Because VWF is required for normal adhesion of platelets to the site of a blood vessel injury and for protection of FVIII in the circulation, deficiency of normal VWF results in a bleeding disorder of varying severity depending on the VWF level, the FVIII level, and other modifying factors.

Not all VWD is caused by a defect in the von Willebrand gene, but the lower a patient’s VWF level, the more likely she is to have a genetic defect. The most common type of VWD, comprising 75% of symptomatic individuals, is type 1, which is characterized by a deficiency of normal VWF and is usually mild. Type 2 VWD is characterized by abnormal VWF: Type 3, which is rare, is characterized by the virtual absence of VWF and is severe.

---

**Quick Take**

- The severity of VWD depends on VWF and FVIII levels and other modifying factors.
- Laboratory assays are limited and no single test reliably identifies the condition.

---

**Dr James** is Consulting Professor in the Department of Obstetrics and Gynecology, Duke University Medical Center, Durham, North Carolina. She has no conflicts of interest to report in respect to the content of this article.
Prevalence
The reported prevalence of VWD depends on the population and the definition of disease. The prevalence based on the number of symptomatic patients seen at hemophilia treatment centers is 1 in 10,000. The prevalence based on the number of women with the diagnosis discharged after childbirth is 1 in 4000.5

The prevalence based on identification of individuals with bleeding symptoms, low VWF, and a positive family history has been estimated to be as high as 1% to 2%.3

Diagnosis, classification
Several forms of VWD exist and current laboratory assays have limitations, so no single test reliably identifies the condition. The diagnosis is based on clinical features and laboratory tests. The initial laboratory work-up consists of a complete blood count to assess hemoglobin and exclude thrombocytopenia; as well as a prothrombin time (PT), an activated partial thromboplastin time (aPTT), and fibrinogen level (or thrombin clot time) to exclude a clotting factor deficiency.6

While these tests are useful for excluding clotting factor deficiencies, the aPTT may be normal in patients with VWD. The next series of tests includes specific tests for VWD including von Willebrand ristocetin cofactor activity (VWF:RCo), von Willebrand factor antigen (VWF:Ag) and FVIII.6 While a VWF:Co level of less than 40 IU/dL (international units per deciliter—the percent functional activity compared to an international reference) is highly likely to be associated with a genetic defect in the VWF gene, the National Institutes of Health/National Heart, Lung, and Blood Institute (NHLBI) criteria for the diagnosis of VWD requires a level <30 IU/dL. The range of 30–50 IU/dL is classified as “low VWF.”6 A VWF:RCo/VWF:Ag ratio ≤0.7 is indicative of type 2 VWD, a deficiency of normally functioning VWF.

Undetectable VWF is indicative of type 3 VWD. The inheritance, prevalence and phenotype of VWD by type are summarized in Table 1.

Results of testing may vary depending on multiple factors, including a patient’s age, stressors, inflammation, hormone levels, pregnancy, the quality of the laboratory, and the timeliness of sample processing. If the sample is not centrifuged promptly to separate the plasma, the plasma proteins may become degraded, yielding an artificially low VWF or FVIII level.6

Often, repeated analyses over several months are required. In many instances, only one of several tests in the panel may be abnormal. Further testing to determine the type and subtype of VWD includes analysis of von Willebrand multimers among other studies. Analysis for genetic mutations provides important information for research, but is not yet considered part of the diagnostic work-up for VWD.

Heavy menstrual bleeding in women with VWD
While other symptoms include bruising: nosebleeds; bleeding after injury, surgery or tooth extraction; and postpartum bleeding, the most common bleeding symptom women with VWD experience is heavy menstrual bleeding (HMB).7 Among women with VWD, a high prevalence of HMB has been reported, ranging from 32% to 100%.6 Not only is there a high prevalence of HMB among women with VWD, but also there is a high prevalence of VWD among women with HMB. Among women with HMB, the prevalence of VWD has been reported to be between 5% and 20%;6 and the prevalence among adolescents, who are less likely to have a structural explanation for their HMB, has been reported to be between 5% and 36%.8

Hemorrhagic ovarian cysts and other reproductive tract bleeding
Women with VWD experience other forms of abnormal reproductive tract bleeding besides HMB. Bleeding at the time of ovulation may result in a
hemorrhagic ovarian cyst or bleeding into the peritoneal cavity. A survey conducted by the Centers for Disease Control and Prevention (CDC) found that 52% of women with VWD reported a history of ovarian cysts, compared to 22% of controls. This difference is likely explained by an increased incidence of hemorrhagic ovarian cysts. In the same CDC survey, 30% of women with VWD reported a history of endometriosis, compared to 13% of controls.

Because of their HMB, women with VWD may be more likely to experience retrograde menstruation and, consequently, endometriosis. There is no evidence that women with bleeding disorders are more likely to develop fibroids, but in the same CDC survey, 32% of women with VWD reported a history of endometriosis, compared to 13% of controls.

Because of their HMB, women with VWD may be more likely to experience retrograde menstruation and, consequently, endometriosis. There is no evidence that women with bleeding disorders are more likely to develop fibroids, but in the same CDC survey, 32% of women with VWD reported a history of endometriosis, compared to 17% of controls. Fibroids contribute to the development of HMB. Since women with VWD are more likely to develop HMB, they may be more likely to become symptomatic with fibroids. In the same CDC survey of women with VWD, 10% reported a history of endometrial hyperplasia compared to 1% of controls, and 8% reported a history of polyps compared to 1% of controls.

It is doubtful that women with VWD are more likely to develop endometrial hyperplasia or polyps, but it is possible that these women become symptomatic sooner.

**Risk of bleeding complications during pregnancy**

Even in women with an inherited bleeding disorder such as VWD, most bleeding at the time of childbirth is obstetrical (due to failure of the uterus to contract or to retained placenta), surgical (due to incisions or lacerations) or (rarely) an acute acquired coagulopathy, but any bleeding at the time of childbirth may be aggravated by VWD. While VWF and FVIII levels rise during pregnancy, median levels in women with VWD remain below the levels of women without VWD and fall rapidly thereafter. They approach baseline by 1 week postpartum, and reach baseline by 3 weeks postpartum. Antepartum bleeding, postpartum hemorrhage, severe postpartum hemorrhage, and perineal hematoma are all increased by 2- to 10-fold in women with VWD.

**Which women with HMB should be screened for VWD?**

A multicenter study sponsored by the CDC has provided some guidance for screening women with HMB for VWD or other underlying bleeding disorders. In the study, 146 women with a physician diagnosis of HMB were administered a 12-page questionnaire and were tested for a wide range of bleeding disorders. A positive response to any 1 of 8 questions that clustered in 4 categories resulted in the highest sensitivity for a bleeding disorder.

The categories were: 1) duration of menses greater than or equal to 7 days and either “flooding” or impairment of daily activities with most periods; 2) a history of treatment of anemia; 3) a family history of a diagnosed bleeding disorder; and 4) a history of excessive bleeding after tooth extraction, delivery, miscarriage, or surgery. In a woman with HMB, a positive response to any 1 of the 8 questions in any of these 4 categories would justify further evaluation and/or referral to a hemostasis expert.

**Management of heavy menstrual bleeding**

Hormonal, hemostatic, and surgical therapies have been used to control HMB in women diagnosed with VWD. Figure 1 gives a suggested algorithm. For a woman who wishes to preserve her fertility but does not wish to become pregnant, the first choice of treatment for HMB should be hormonal therapy. Endometrial ablation or hysterectomy is an option for women who do not wish to preserve their fertility. Those who wish to become pregnant or fail hormonal therapy should...
be referred to a hemophilia treatment center or hemostasis expert for hemostatic therapy. Tranexamic acid (an anti-fibrinolytic medication) is an option and, for responders, desmopressin nasal spray is also a consideration. Desmopressin, a synthetic analog of vasopressin, stimulates release of endogenous stores of VWF from the Weibel-Palade bodies of endothelial cells. It is usually effective in type 1 VWD, sometimes effective in type 2 VWD, and ineffective in type 3 VWD (due to absent VWF). To assess effectiveness, a desmopressin challenge test may be performed. In type 2B, a form of type 2 VWD that is characterized by VWF with increased binding to platelets, desmopressin may cause a drop in platelets. Some hemostasis experts recommend against desmopressin in type 2B VWD for this reason. VWF concentrate is reserved for women with severe VWD who wish to preserve their fertility but have not responded to other therapies, including combinations of other therapies. Cryoprecipitate, which does not undergo viral inactivation, should not be used.

While hysterectomy among women with VWD carries a 3-fold increased risk of bleeding complications and 6-fold increased risk of transfusion, women who require the operation should not be deprived of its benefits. Because HMB is often the primary bleeding symptom that women with VWD experience, hysterectomy can eliminate the symptom and significantly improve quality of life. Hysterectomy, like other major surgical procedures, should be performed in a hemophilia treatment center or other center with requisite support from hematology, anesthesiology, pharmacy, and the laboratory.

Management of pregnancy and childbirth
Ideally, planning for pregnancy begins before conception. Women with VWD contemplating pregnancy should be aware that they may be at increased risk of bleeding complications during pregnancy and are definitely at increased risk of postpartum hemorrhage. Prior to conception or during pregnancy, women should be offered the opportunity to speak with a genetic counselor regarding the inheritance of VWD and with a pediatric hematologist regarding evaluation of the infant after delivery. Women can be reassured that their infants will not be severely affected.

With the exception of type 3 (the severe form of the disease) and type 2 N VWD, which are autosomal recessive (homozygous or compound heterozygous), transmission of VWD is autosomal dominant. Therefore, unless the father of the infant has VWD, the infant’s phenotype will be mild or moderate. If the father of the infant has VWD and both parents have known genetic mutations, prenatal diagnosis of type 3 VWD is theoretically possible. Because of the increased risk of transfusion, women who have not already been vaccinated should be immunized against hepatitis A and hepatitis B.

Women with type 1 VWD with VWF:RCo and FVIII levels ≥50 IU/dL and no history of severe bleeding do not require treatment at time of delivery. A recent study found that these women have the same estimated blood loss (EBL) at the time of delivery, same postpartum hematocrit, and same amount of lochial bleeding as women without VWD. Anesthesiologists should know that women whose VWF levels are >50 IU/dL in the last month of pregnancy will have levels >50 IU/dL intrapartum, allowing for the option of regional anesthesia. Because nonsteroidal anti-inflammatory drugs may affect platelet function and systemic hemostasis, they should be avoided and acetaminophen or opioid analge-
sia prescribed instead. Because the fetus/neonate has a 50% chance of having VWD, invasive procedures such as use of scalp electrode and operative vaginal delivery should be avoided whenever possible. At time of delivery, cord blood can be collected and sent for von Willebrand studies. Circumcision of a male infant should be postponed until his VWD status is known.

Women with type 3 VWD, type 2 VWD or type 1 VWD with FVIII or VWF levels lower than 50 IU/dL or a history of severe bleeding should be referred for prenatal care and delivery to a center where, in addition to specialists in high-risk obstetrics, there is a hemophilia treatment center and/or a hematologist with expertise in hemostasis. Laboratory, pharmacy, and blood bank support is essential. Prior to delivery or invasive procedures, these women should have the opportunity to meet with an anesthesiologist.

Prior to chorionic villus sampling, amniocentesis, or cervical cerclage, these women should receive prophylaxis with desmopressin or VWF concentrate. Candidates for treatment with desmopressin have usually received it at some time in their past and ideally would have been tested with a desmopressin challenge test to see how well they respond to the medication. If a desmopressin challenge test has not been performed prior to pregnancy, it should not be performed during pregnancy. In anticipation of delivery, FVIII and VWF:RCo levels should be obtained around 36 weeks’ gestation.

Patients who require prophylaxis at the time of delivery for VWF:RCo levels lower than 50 IU/dL should be treated with VWF concentrate, which is safe for mothers and fetuses. Four VWF factor concentrates are currently licensed in the United States. Three are virally inactivated, purified plasma products with varying ratios of FVIII. The fourth is a recombinant VWF product and contains no FVIII. The product used will likely depend on the formulary at the institution where the patient delivers and the experience of the attending hematologist, who will make a product-specific calculation based on the patient’s weight, existing VWF level, and target VWF level. The target level should be ≥100 IU/dL intrapartum and during hospitalization. Prescribing information and dosing calculators can be found on product websites. One product website gives the list price per unit of the manufacturer’s product ($0.60 per VWF:RCo unit) compared to the list price per unit of a competitor’s product ($0.75 per VWF:RCo unit). Neither includes the cost of administration, but the cost for a single dose of the medication for a typical patient weighing 70 kg and receiving 50 units per kg would be between $2000 and $3000.

During hospitalization, the dose may be administered periodically as a bolus, or, alternatively, as a continuous infusion.

Our practice is to administer a bolus on admission, followed by a continuous infusion of 2 IU/dL per hour. After discharge, the target VWF level should be ≥50 IU/dL. If ongoing therapy is 

![Algorithm for Management of VWD-Related Menorrhagia](algorithm.png)
NEARLY 20% OF PROM PATIENTS EXHIBIT VAGINAL BLEEDING

Actim® PROM
The Only PROM Test Proven Effective in the Presence of Whole Blood and Other Common Contaminants

Why risk inaccurate diagnosis when there’s one PROM test proven effective for patients with vaginal bleeding. For more than 20 years, Actim PROM has been used to effectively diagnose more than 5 million PROM patients worldwide. Now available in the U.S. at a special introductory price. Contact us at 800.243.2974 or www.coopersurgical.com.

©2017 CooperSurgical, Inc. 82670 Rev. 2/17
EXTERNAL CEPHALIC VERSION In the United States, there is a widespread belief that the overall cesarean delivery rate is higher than necessary. Efforts are being directed toward decreasing the number of these procedures, in part by encouraging physicians to make changes in their management practices. Because breech presentations are associated with a high rate of cesarean delivery, there is renewed interest in techniques such as external cephalic version (ECV) and vaginal breech delivery. The purpose of this document is to provide information about ECV by summarizing the relevant evidence presented in published studies and to make recommendations regarding its use in obstetric practice.

COMMENTARY

ECV: A tool to prevent the first cesarean

by STEPHEN F THUNG, MD, MSCI

When I was a resident at New York University/Bellevue Hospital, one of my least favorite procedures was external cephalic version (ECV). Converting a breech fetus to cephalic was just another lost vaginal breech opportunity—an experience that became more and more scarce when I trained in the 1990s.

Enthusiasm for delivering breech fetuses vaginally has waned over the years. For most of us, an unresolved breech at the time of delivery now means taking the path of least resistance—performing a quick and typically uneventful primary cesarean delivery.

Term fetal malpresentation occurs frequently—in about 3% of pregnancies—and is a common indication for cesarean. As the Chief of the Obstetrical Service at Ohio State University trying to find methods to reduce our primary cesarean rates, I now find ECV to be one of my best allies and an important tool for preventing that first cesarean. ACOG’s Practice Bulletin on ECV has been updated after 17 years and is a concise summary of the latest information that every obstetrical provider needs to be familiar with and is designed to help make ECV safe and successful.1

ECV is a long-standing procedure that increases the likelihood that a baby is in cephalic presentation at the time of birth. Data from the Cochrane Database clearly support this practice as it reduces the risk of cesarean birth [RR 0.57; 95% CI, 0.40-0.82] when compared to no ECV attempt.2 ACOG strongly supports universal screening for presentation at 36 weeks’ gestation for those eligible for...
vaginal birth, and routine counseling of women on this option beginning at 37 weeks’ gestation. Women with malpresentation also should be counseled starting at 37 weeks.

Given that many women are not receiving this opportunity, ACOG has proposed a metric: Percentage of women identified with fetal malpresentation without contraindications to vaginal birth who are also counseled about their ECV options.

Is ECV safe?

One Cochrane study demonstrated excellent outcomes in women undergoing ECV with no differences in Apgars, umbilical cord pH, or neonatal deaths compared to women who do not have ECV. Although there have been case reports of adverse events, it has always been challenging to attribute these rare events to ECV itself. ACOG continues to support performing ECV at sites where immediate evaluation and emergency cesarean are available.

Immediate induction after successful ECV is not supported. As a clinician, I know it is tempting, but please resist the temptation, particularly before 39 weeks.

Important changes

The best timing of ECV is controversial. It has been modified from later than 36 weeks’ gestation to early term—37 weeks or greater. When compared with term ECV (37+ weeks), preterm ECV (34–35 weeks) has been associated with increased short-term success with cephalic presentation, higher rates of reversion to breech in the ensuing weeks, and cesarean delivery risk reduction [RR 0.90; 95% CI 0.83–0.97]. However, preterm ECV is also associated with an increased risk of premature birth [RR...
The current recommendation for ECVs at term could reduce their frequency and prevent unnecessary prematurity at the expense of a potentially small increase in cesarean delivery risk.

Parenteral tocolysis (beta agonist) should be used if there are no contraindications. Many of us already use some form of tocolysis to reduce uterine tone. Recent data support what many of us have suspected—that a tocolytic improves ECV success [RR 1.68; 95% CI, 1.14–2.48] and reduces cesarean delivery risk [RR 0.77; 95% CI, 0.67–0.88]. Although my experience has been with either magnesium or terbutaline, ACOG recommends the latter, citing insufficient evidence to support the use of alternative tocolytics.4

Unresolved controversies
Is early labor or prior uterine scar a contraindication to ECV? Information is insufficient to make clear recommendations on this practice. The likelihood of success is not likely to significantly differ from that in women without these conditions, however, the magnitude of pregnancy risk has not been quantified due to insufficient study. ACOG does not consider these conditions to be contraindications to ECV and care of women in these situations should be individualized.

Whether to offer regional anesthesia at the time of ECV remains unclear, with discordant results in randomized trials exploring this question. Although there are some advantages, such as being able to offer cesarean delivery immediately if complications arise, the data do not currently support routine use. A recent meta-analysis demonstrated greater immediate ECV success, but did not show a significant reduction in cesarean delivery risk with regional anesthesia [RR 0.80; 95% CI, 0.55–1.17]. These findings did not differ for spinal or epidural.5

Although many factors have been associated with success and failure, unlike predicting successful trial of labor after cesarean section, no reliable or validated scoring system exists to counsel patients regarding their likelihood of avoiding a cesarean delivery.

New recommendations
Non-stress test monitoring should occur before and after ECV. Testing should continue for at least 30 minutes after the procedure. Anti-D immune globulin should be given to Rh-negative mothers who have no plans for delivery within 72 hours after ECV. This new ACOG guidance is a reminder of the importance of routine screening for malpresentation in the third trimester. The evidence justifies ECV as a critical tool for providers to prevent cesarean delivery. Moreover, available evidence continues to be a useful guide for accomplishing a safe and effective ECV.

REFERENCES

IMMEDIATE INDUCTION AFTER SUCCESSFUL ECV IS NOT SUPPORTED, PARTICULARLY BEFORE 39 WEEKS’ GESTATION.
**OVA1 Sensitivity Across Ovarian Cancer Subtypes**

<table>
<thead>
<tr>
<th>Subtype</th>
<th>Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>EOC</td>
<td>99%</td>
</tr>
<tr>
<td>Non-EOC</td>
<td>92%</td>
</tr>
<tr>
<td>Borderline/LMP</td>
<td>86%</td>
</tr>
<tr>
<td>Metastatic to ovary</td>
<td>100%</td>
</tr>
<tr>
<td>Non-ovarian malignancy</td>
<td>90%</td>
</tr>
</tbody>
</table>

Different types of ovarian cancer are diagnosed depending on where they start in a given cell. The 2013 Bristow, et al. study included the effectiveness of using OVA1 (MIA) to detect ovarian cancer subtypes. OVA1 detected epithelial ovarian cancer (EOC) at a 99% rate compared to CA-125 at 89%.

OVA1 also had a higher detection rate among non-epithelial cancer (Non-EOC) at a 92% compared to 76% for CA-125. The study reemphasizes OVA1’s ability to detect all types of ovarian cancer in any aged woman and at any stage.

### EOC subtypes:
- Serous
- Transitional
- Mucinous
- Carcinosarcoma

### Non-EOC subtypes:
- Sex cord-stromal
- Germ cell
- Other


*With clinical assessment*
PART 2 OF 2

When a pregnancy fails early

EPF overdiagnosis can cause harm, so 100% specificity is the goal.

by LAUREN HIBLER CARLOS, MD; OLGA GRECHUKHINA, MD; AND ANNA K SFAKIANAKI, MD, MPH

Management

Management options for EPF traditionally include expectant, medical, and surgical methods. Surgical management is the only option for clinically unstable patients with conditions such as life-threatening hemorrhage, septic abortion, or disseminated intravascular coagulation. If a patient chooses expectant management, she may be motivated to avoid surgery or medication. With expectant management comes a higher chance of an unscheduled surgery, and likely more bleeding than with other options. It is estimated that within 8 weeks after diagnosis of EPF, 80% of women will successfully achieve complete expulsion of the POCs.

Medical management is a reasonable option for clinically stable patients who would like to facilitate expulsion of the POCs but would like to avoid a surgical procedure. The success rate for misoprostol 800 mcg vaginally is 71% by day 3 after a single dose and 84% after a second dose given 3 hours to 7 days after the first. Rates of success range from 81% for anembryonic gestations to 93% for inevitable abortions. The success rate is higher with pregnancies of earlier gestational age.

Finally, surgery may be a patient’s preference if she wishes to have a predictable end, or desires anesthesia. The risks of this option are standard D&C surgical risks, which include those associated with anesthesia, injury to the vagina, cervix, or uterus (eg, perforation), and need for further surgery because of injury or incomplete evacuation of POCs. Ninety-seven percent of women managed with this option have resolution of the pregnancy. They also do not require serial hCG levels, if the presence of chorionic villi or the gestational sac in the obtained material was confirmed (visually by the gynecologist or during pathological evaluation of the removed POCs). Patients should be told to notify
their providers if they have prolonged or heavy vaginal bleeding after surgical management. Transvaginal U/S is then indicated to rule out retained POCs or enhanced myometrial vascularity as a possible cause of bleeding. Abnormal placental invasion (especially in women with a history of prior cesarean delivery) should be considered as a possible etiology of prolonged bleeding after medical or surgical management.

Regardless of the method, the patient should be offered emotional support and referral to counseling.

Ectopic pregnancy

Ectopic pregnancy is an abnormally located gestation and is estimated to occur in 1%–2% of all pregnancies. Technically it is also an EPF in that it will not result in a viable gestation. Ectopic pregnancy represents a significant cause of maternal morbidity and mortality and accounts for 15% of pregnancy-related deaths. Most commonly, it is located in the fallopian tube, however, some patients will have atypical sites of POC, such as a cesarean scar (6% of all ectopic pregnancies), the cornua (1%), the ovary (1%–3%) or the cervix (<1%) (Figure 1A, 1B). In ectopic pregnancy, hCG level does not accurately predict the risk of pregnancy rupture and life-threatening complication. Diagnosis and management of ectopic pregnancies are beyond the scope of this review.

Pregnancy of unknown location

The term “pregnancy of unknown location” (PUL) is used when a woman has a positive urine or serum pregnancy test but transvaginal U/S fails to identify intrauterine or ectopic pregnancy. This is a transient state rather than a diagnosis and it is important to eventually classify the case as IUP (whether viable or not) or ectopic pregnancy, because their management is very different. Given the high risk associated with misdiagnosing ectopic pregnancy, in cases of PUL it should be assumed that the woman may have an ectopic pregnancy until proven otherwise. Without evidence of clinical instability, expectant management is usually appropriate to avoid false-positive diagnosis of ectopic pregnancy and related measures aimed at pregnancy termination that may be unnecessary. Patients with this diagnosis need very close follow-up until an IUP is confirmed or the diagnosis of ectopic pregnancy is made and the action has been taken. Because the

**FIGURE 1A.** Tubal ectopic pregnancy in the left adnexa, lateral to the ovary with corpus luteum.

**FIGURE 1B.** Cesarean scar (ectopic) pregnancy on transvaginal ultrasound, sagittal plane. The pregnancy is located in the cesarean scar or niche. Note the empty uterine fundus.
ability to localize a pregnancy and confirm its viability or nonviability is significantly related to gestational age, a first scan after 49 days has been proposed to avoid overdiagnosis of PUL.25

Recovery
Following management of EPL and confirmation of resolution, follow-up should be tailored to a woman’s needs. If the pregnancy was planned and the woman intends to attempt pregnancy again soon, prenatal vitamins with folate acid should be recommended. Many ob/gyns recommend postponing another pregnancy for 3 months after an EPF. However, recent studies show no physiologic evidence that conceiving quickly has any harmful effects on subsequent pregnancy, thus making such recommendations unwarranted and, at times, psychologically stressful.26,27

Women who have a miscarriage immediately before a viable pregnancy have more pregnancy-related anxiety. Because high levels of anxiety can be associated with poor obstetric outcomes, these patients should be screened for counseling and referred to appropriate providers as needed.28

If the pregnancy was unplanned and pregnancy is not desired, the woman should be counseled regarding birth control. Options should be guided by the US Medical Eligibility Criteria (USMEC).29

Recurrent pregnancy loss
Recurrent pregnancy loss is defined by the ASRM as 2 or more miscarriages. Evaluation is recommended after 3 miscarriages. Although this topic is beyond the scope of this review, it is worth mentioning that all patients diagnosed with EPF should be screened for RPL because they may require additional evaluation.30 Potential causes of RPL include congenital and acquired structural uterine abnormalities, certain medical conditions (antiphospholipid syndrome, lupus, diabetes), and genetic disorders. Genetic analysis of the POC should be offered to the patient. The risk of subsequent miscarriage is directly proportional the number of prior miscarriages.

Additional considerations
In most cases, diagnosis of EPF is based on U/S findings, underscoring the importance of having the sonographic evaluation performed by a qualified provider using high-resolution transvaginal U/S. In high-resource settings, it is worth involving a maternal-fetal medicine (MFM) specialist to minimize risks of misdiagnosis.31 In communities where MFM physicians are available, >75% of general ob/gyns refer patients for comprehensive U/S evaluation.31 MFM consultation should always be considered when the diagnosis is not clear. In settings where MFM providers are not available and the reproducibility of the U/S evaluations is in question, increasing the numbers of sequential U/S images for clinically stable patients may be warranted. The best management option for a particular patient with EPF at times has to be tailored to her preference as well as facility resources and staffing.

If many providers are involved in a patient’s care, it is crucial to be sensitive to her emotional status and avoid unnecessary or premature counseling unless the diagnosis is clear and in line with guidelines. Fragmented care may contribute to anxiety and worse outcome in patients with EPF and ectopic pregnancies.32

For References Visit contemporaryobgyn.net/early-failure

This is the second part of a 2-part series on early pregnancy failure. Find part 1, covering evaluation of location and viability, in the April 2017 issue. contemporaryobgyn.net/early-failure
The Advincula Delineator™
Exceptional Strength. Single-use Convenience.

The Advincula Delineator is engineered to combine exceptional strength and safety with the ease and convenience of a disposable uterine manipulator. The shaft and Koh-Efficient® colpotomy system are fully integrated, providing unprecedented access, visualization and safety during TLH, LSH and LAVH procedures.

- Rigid colpotomy cup clearly delineates vaginal fornices with proper cephalad pressure.
- Best in class pneumo occluder balloon is built into the Koh-Efficient.
- Exceptional control and strength.
- No assembly required.

To place an order, or to learn more, contact your CooperSurgical representative, visit CooperSurgical.com, or call 800.243.2974 or 203.601.5200.

©2017 CooperSurgical, Inc. 82612 Rev. 2/17
Maintaining excellence in obstetrics and gynecology

A call to action from leaders in the field.

by JOHN C HOBBS, MD; E ALBERT REECE, MD, PHD, MS; NATHAN KASE, MD, MS; HUGH TAYLOR, MD; LEON SPEROFF, MD; MARY JANE MINKIN, MD; THOMAS HANSON, MD; AND JOSHUA A COPEL, MD

EDUCATION

CHALLENGES

1. Suboptimal residency training

The goals of ob/gyn resident training are preparing trainees to independently manage labor and perform deliveries; undertake basic obstetric and gynecological ultrasound exams; provide basic gynecologic care, including infertility and family planning; and perform standard transabdominal, transvaginal, and laparoscopic gynecologic surgeries. However, these goals are not being fully met.

Guntupalli et al found that only 20% of resident graduates were able to independently perform a vaginal hysterectomy; only 46% were capable of performing a total abdominal hysterectomy; and, surprisingly, only 63% were capable of providing appropriate postoperative care. Operative vaginal delivery has become a lost art, contributing to the surge in cesarean deliveries.

2. Inadequate GME funding

Since 1997 there has been a $15 billion annual funding cap on graduate medical education (GME), which cur-
Currently costs $27 billion to deliver each year. This differential cost has largely been borne by hospitals, and, in some cases, individual departments within academic institutions. Limited GME funding poses a major constraint to expanding ob/gyn residency training opportunities, exacerbating shortages in some regions.

Training more residents may be very difficult if the Trump administration takes an austerity approach to funding for healthcare. The changing scope of resident training and impact of fellowship education

The exponential increase in medical knowledge means that medical education must fundamentally change to emphasize “just-in-time” acquisition of data from reliable sources and integration of this knowledge into patient care. This requires curricula that cover genomic sequencing, metabolic analyses, and mining of enormous clinical databases.

Ob/gyn equipment and procedures have also become increasingly complex and specialized. In short, there is more to learn and less time to assimilate it. This is one of the reasons that subspecialty fellowship training gained momentum by providing expertise in areas where training for specialists might be suffering from an increasing scope of educational requirements.

The problem with this approach is that a competent subspecialist also needs not only to initially learn, but also to maintain his/her basic skills, leading to competition for cases between fellows and residents.

3. Duty-hour restrictions and the “shift mindset”

With the advent of the 80-hour work week, residents spend most of their time outside the hospital, and many hours of in-hospital time are devoted to non-patient care duties (eg, EHR documentation). Previously, residents often worked longer hours and were exposed to entire episodes of care. That allowed them to be available for learning opportunities that arose outside the confines of a predictable schedule.

Today’s rigid duty-hour requirements eliminate the training benefits of following a complex patient from presentation to resolution.

While the 80-hour shift was initiated to limit mistakes due to fatigue and to improve the lives of overworked residents, studies have shown no improvement in the quality of care or in measurable patient-safety indicators.

SOLUTIONS

1. Reform GME funding

The National Academy of Medicine has endorsed a detailed plan for reforming and expanding GME funding that would fund a modest increase in residency slots. Among the recommendations are that various GME funding streams be merged and used to directly fund all residents and fellows at geographic- and inflation-adjusted values and that GME funds no longer be distributed to hospitals but to those responsible for training and accreditation (eg, medical schools and academic medical centers). The plan recommends that after a 10-year transition, all federal GME payments reward performance and reflect national, regional, and local workforce needs.

2. Restructure residency/fellowship programs

As noted, our specialty has grown increasingly complex but the adequacy of training has lagged and work-hour restrictions have exacerbated the problem. It is unclear how well new pedagogic concepts including surgical simulation will improve training and compensate for lost operative teaching time due to duty-hour restrictions, but these approaches should be studied. However, even if marginally beneficial, simulation is unlikely to address the growing inadequacy of ob/gyn training. Thus, we must either accept the status quo or embrace a new GME structure.

As proposed by CREOG, a possible solution may be a 3-year core residency in ob/gyn, after which all residents pursue a 3-year subspecialty fellowship, or an additional 2 years of advanced general ob/gyn rotations with enhanced exposure to outpatient internal medicine to burnish primary-care expertise. Past experimentation with such reforms suggests that they must be universally applied to be successful.

In another call to action, Berkowitz and Minkoff have described the challenges in preparing ob/gyn practitioners...
WHEN SIMPLE THINGS BECOME VERY, VERY, VERY AWFUL

It may be vulvar and vaginal atrophy (VVA), a chronic and progressive medical condition that affects many menopausal women.1-3

VVA, a component of genitourinary syndrome of menopause (GSM), is a common condition in menopausal women caused by a decrease in estrogen.1-4 Approximately 1 in 2 menopausal women in the United States experience VVA symptoms.2,3 The most common physical symptoms of VVA include dyspareunia (painful sex), vaginal dryness, burning, and irritation or soreness. Urinary symptoms such as dysuria (painful urination) and recurrent urinary tract infections are also associated with VVA.1-4 These symptoms may negatively impact a woman’s sense of self, relationships, and enjoyment of life.2,5

Unlike night sweats and hot flashes, VVA may not resolve without treatment,1 putting many women in a prickly situation.

Rethink the full impact of VVA at VVAHURTS.com
tutioners to adapt to today’s changing healthcare milieu, identifying areas that need immediate attention, especially with regards to resident/fellowship education. The resident’s 80-hour workweek mandate should be revisited. These regulations need restructuring to foster more continuity of care, while allowing residents and fellows to recover after a longer period of patient care.

Programs also should be restructured to foster more continuity of care, while allowing residents and fellows to recover after a longer period of patient care.

Programs also should be restructured to foster more continuity of care, while allowing residents and fellows to recover after a longer period of patient care.

Programs also should be restructured to foster more continuity of care, while allowing residents and fellows to recover after a longer period of patient care.

Programs also should be restructured to foster more continuity of care, while allowing residents and fellows to recover after a longer period of patient care.

Programs also should be restructured to foster more continuity of care, while allowing residents and fellows to recover after a longer period of patient care.

First Person

Challenges

1. Inadequate funding

Between 1998 and 2003, the overall NIH budget doubled. Unfortunately, during that time, the relative proportion of funding for the primary driver of pediatric and reproductive research—the Eunice Kennedy Shriver National Institutes of Child Health and Human Development (NICHD)—fell appreciably. More- over, since 2004, the federal budget allocation for the NIH has remained flat, and if corrected for inflation, has actually decreased significantly. As a consequence, NIH grant application success rates have plummeted from 31% to 17%, with many institutes now reporting pay lines of 7% for new grant applications.

Recent commitments by the federal government to increase the NIH budget (eg, the 21st Century Cures Act), are an encouraging sign but will raise actual NIH funding very modestly and do not specifically address major issues in women’s reproductive research such as PTB, the leading cause of infant mortality in the United States. Of greatest concern is the very recent proposed budget by the new administration, which would cut substantially the overall NIH allocation and negate any funding gains made by the 21st Century Cures Act.

More recent and ominous data fuel concern regarding lack of support, specifically, for ob/gyn research. A review of the Blue Ridge Institute report on NIH funding for research in our specialty during the past several years reveals a downward trend, from a high of $168 million in 2008 to just over $124 million in 2014, a decline of 26% (Figure 1).

While the current emphasis on “evidence-based medicine” is laudable, it has steered NICHD extramural funding toward important, but costly, multicenter randomized clinical trials (RCTs). That has left less funding available to support smaller investigator-initiated translational science projects. Without the latter, there will be few new hypotheses to test through RCTs and progress will slow.

2. Lack of academic emphasis on research

While clinical faculty researchers around the country are struggling to generate enough income to attain their required relative value equivalents, little time is left for research. Because of inadequate external support, only the most affluent departments can afford to hire investigators in basic science or translational research.

Funding for small pilot studies has been accomplished by allocating a portion of department clinical revenue into academic enrichment funds. However, the increased overhead as-
associated with carrying out even small pilot studies now absorbs many more dollars than are available in this ever-shrinking pot.

**SOLUTIONS**

1. **Lobby for more federal/private support of research**

   Our professional societies need to coalesce to form a focused, coherent, and coordinated advocacy effort to increase the NICHD budget. Politicians listen to groups that wield the most power and who have a cause that affects them directly or indirectly.

   If the various groups within our specialty were to coalesce and focus on our primary mission—to prevent, diagnose, and treat conditions affecting all women and, indirectly, their children—the result would represent a unified message from a powerful special-interest group. Research on healthcare for women needs to be promoted, which would require some reprioritizing of the NIH budget.

2. **Create an atmosphere conducive to research**

   Change must begin with medical school deans. As leaders, deans must kick-start new strategies to enhance protected time for research pursuits. Indeed, the Association of American Medical Colleges Council of United States Medical School Deans has discussed this dilemma. The future of our discipline lies not only in training more physicians, but also in educating well-trained physicians and physician-scientists to conduct research.

   We must re-examine the medical school curriculum and bolster analytic thinking skills in students early in their professional careers. For example, a course could be implemented that requires first-year medical students to complete a research project under the guidance of a well-funded faculty mentor.

   A second strategy is to rebalance the responsibilities of faculty members at academic medical centers to allow them to conduct research. Not all studies need hundreds of thousands of dollars of support. In past years, small pilot clinical studies were conducted by faculty, fellows, and residents in parallel with their clinical endeavors, often without additional salary support, but time was allowed for these activities. Today, with some reapportionment of responsibilities and some modest off-hours commitment to research, many projects could be completed without mega-dollar help.

---

**THE AUTHORS**

Thank Julie A Rosen, PhD, Senior Executive Director for Research and Science at the University of Maryland School of Medicine, for her help with this manuscript.

**DR HOBBINS** is Professor of Obstetrics and Gynecology, University of Colorado School of Medicine, Denver, Colorado.

**DR REECE** is Vice President for Medical Affairs, John Z and Akiko K Bowers Distinguished Professor, and Dean, University of Maryland School of Medicine, Baltimore, Maryland.

**DR KASE** is Dean Emeritus, Professor of Obstetrics, Gynecology and Reproductive Sciences, Mount Sinai Health System, New York, New York.

**DR TAYLOR** is Chair and Anita O’Keefe Professor of Obstetrics, Gynecology and Reproductive Sciences and Professor of Molecular, Cellular, and Developmental Biology, Yale School of Medicine, New Haven, Connecticut.

**DR SPEROFF** is Professor Emeritus, Department of Obstetrics and Gynecology, Oregon Health and Science University, Portland, Oregon.

**DR MINKIN** is Clinical of Obstetrics, Gynecology and Reproductive Sciences, Yale School of Medicine, New Haven, Connecticut.

**DR HANSON** is Clinical of Obstetrics, Gynecology and Reproductive Sciences, Yale School of Medicine, New Haven, Connecticut.

**DR COPEL** is Professor of Obstetrics and Gynecology, Reproductive Sciences, and Pediatrics, Yale School of Medicine, New Haven, Connecticut.

---

**FOR REFERENCES VISIT contemporaryobgyn.net/excellence**

---
Sureglide

COMPANY ECOMED SOLUTIONS, LLC (MUNDELEIN, IL)
WEBSITE www.ecomed-solutions.com | LIST PRICE $18 EACH

DESIGN/FUNCTIONALITY ★★★★★ | INNOVATION ★ | VALUE ★★★★ | OVERALL SCORE ★★★★

Background
Creating a hysterotomy during cesarean delivery is as basic a skill as exists in the practice of obstetrics. Unfortunately, about 0.7% to 1.9% of the time while cutting into the uterus, babies are cut as well.¹² While at first glance that percentage may seem low, when one takes into consideration that about 1.5 million cesarean deliveries are performed every year in the United States, this small percentage amounts to about 10,500 unnecessary injuries, especially when the appropriate number should be closer to zero!

Design/Functionality
To minimize the risk of iatrogenic scalpel injuries to babies at the time of cesarean delivery, Ecomed Solutions has introduced the Sureglide cesarean delivery safety scalpel. Its straightforward design offers a stainless steel surgical blade encased in a plastic handle that extends past the blade and forms into a pointed tip. The idea is to use the plastic tip to enter the uterus and then extend the hysterotomy by cutting up and away from the baby. Not surprisingly, in trial use in the operating room, Sureglide worked exactly as expected. With the blade facing up, the tip is pushed through the serosa and myometrium. The hand holding the device is then gently rocked back and pushed forward while the blade safely and efficiently creates a hysterotomy. Easy. Quick. Safe.

Innovation
On the innovation front, Sureglide is a little wanting as its doppelgänger C Safe has been on the market for several years. In my opinion the 2 devices look, feel and perform almost identically and because C Safe was first, it gets all the innovation points.

Value
By medical device standards, Sureglide is pretty inexpensive ($18 each) but it is still more costly than a #10 scalpel blade. That said, the value play is really about how many cut babies you and your hospital are willing to tolerate.

Summary
I have opined before that I think it is time we made newborn lacerations at the time of cesarean delivery a “never” event because we have the technology to essentially eliminate the problem. While rising health care costs are always an issue, I am pretty confident most parents would pay for this device themselves out-of-pocket if they knew it could prevent an accidental laceration to their baby.

REFERENCES
Uberlube

**COMPANY** ÜBERLUBE LLC (EVANSTON, IL)

**LIST PRICE** $14 (15 ML); $18 (50 ML); $28 (100 ML)

**WEBSITE** www.uberlube.com

**DESIGN/FUNCTIONALITY** ★★★★★ | **INNOVATION** ★★★★★

**VALUE** ★★★★★ | **OVERALL SCORE** ★★★★★

**Background**

Vaginal dryness and dyspareunia are issues for which every gynecologist needs suggestions and options to provide to patients. By at least one account, genitourinary syndrome of menopause (GSM) and GSM-like symptoms affect about 15% of premenopausal women and 40% to 54% of post-menopausal women¹ and those numbers do not fully encompass the entire universe of sexual lubricant needs. While estrogens may serve as the prescription cornerstone of therapy to address GSM, over-the-counter (OTC) lubricants found in the pharmacy are more widely used by patients and their

CONTINUED ON PAGE 43
TOOLS TEST DRIVE

TruClear ULTRA Mini tissue removal device

Circa 1998, Dr Mark Hans Emanuel in the Netherlands went into his garage with an orthopedic shaver and came out with the first hysteroscopic mechanical tissue morcellator. Five years later in 2003, Smith & Nephew received 510(k) clearance from the FDA and the Smith & Nephew IUR Morcellation System (now TruClear, owned by Medtronic) was ready for clinical use in the US. Some 14 years and tens of thousands of hysteroscopic morcellation procedures later, hysteroscope mechanical tissue morcellation is a standard for many gynecologists for resecting intracavitary uterine pathology.

For those physicians who have been practicing in a cave and are unfamiliar with hysteroscopic mechanical morcellation here is a quick primer. Hysteroscopic mechanical morcellators utilize device-specific operating hysteroscopes with integrated opticals, inflow and outflow channels and large open central lumens through which proprietary morcellator devices can pass. They function best with high inflow/outflow fluid management systems that can accommodate the large fluid burdens that accompany the procedures due to the need to replace the distention media that is suctioned off removing morcellated tissue. The TruClear system is available in 2 sizes: TruClear 8.0, a 9 mm (27 Fr) hysteroscope for larger pathology and the nimbler TruClear 5C or 5.0, a 5.7 mm (17 Fr) hysteroscope for smaller pathology. The business ends of these systems are single-use tissue removal devices that pass through the central lumens and simultaneously morcellate and aspirate targeted tissues. They come in 2 designs: a rotating serrated blade for softer tissues (i.e. polyps, retained POCs) and a more robust reciprocating, guillotine-style cutting blade for denser tissues (i.e. submu– cus myomas). Until now, only the larger TruClear 8.0 had a reciprocating cutting bladder but the Ultra Mini changes that.

THE DEVICE HAS A RECIPROCATING, GUILLOTINE–STYLE CUTTING BLADE DESIGNED TO RESECT DENSER TISSUES.

Design/Functionality

TruClear ULTRA Mini tissue removal device is a single-use, stainless steel, 2.9 mm OD instrument designed to function with the TruClear 5C or 5.0 hysteroscope set. Like its 4.0-mm OD cousin, the TruClear ULTRA Plus device has a reciprocating, guillotine-style cutting blade designed to resect denser tissues. But unlike its zaftig
necessary, we prescribe a daily bolus. In a recent prospective, observational study of 35 pregnancies in 32 women, conducted at 5 prominent hemostasis centers, treatment was required for 17 pregnancies in 15 women. No consistent protocol was followed and treatment varied in intensity and duration.\cite{10} Patients were treated from the time of admission for childbirth until 1 day to 3 weeks postpartum. Despite treatment, these women had EBLs that were 50% greater, hematocrits that nadired 20% lower, and lochia that was significantly greater than women without VWD or than women who did not require treatment. This would suggest that women who require treatment are currently undertreated.

Desmopressin has been used to raise VWF and FVIII at the time of delivery in responders, but fluid retention, hyponatremia, and grand mal seizures have been reported with its use at the time of childbirth.\cite{14} Because fluids should be limited to 1000 mL per day during its administration, while women commonly receive 1–2 L or more of fluid at the time of a vaginal delivery and 2–3 L or more at the time of cesarean delivery, and given that oxytocin may further exacerbate hyponatremia, the use of desmopressin is best reserved until a patient is no longer receiving intravenous fluids.

If required during pregnancy for prophylaxis at the time of procedures during pregnancy (as opposed to delivery), desmopressin is generally thought to be safe for mother and fetus.\cite{6}

Tranexamic acid crosses the placenta and is transferred into breast milk. While there are no reported adverse fetal or neonatal effects, there is very little information. tranexamic acid is generally not used prior to delivery, but is an option for the prevention and management of bleeding after delivery.

Additional information

More information for providers is available on the websites of NHLBI, CDC and the Foundation for Women and Girls with Blood Disorders. Resources for patients are available on the websites of the CDC and the National Hemophilia Foundation.

REFERENCES


SINCE WOMEN WITH VWD ARE MORE LIKELY TO DEVELOP HMB, THEY MAY BE MORE LIKELY TO BECOME SYMPTOMATIC WITH FIBROIDS.
relative, the ULTRA Mini fits through a 5.7 mm hysteroscope. In use in the OR, the ULTRA Mini was a tissue-chomping beast. The company claims that ULTRA Mini resects tissue at 4.4 grams/minute. While this is Usain Bolt range speed (typical myoma resection rates for morcellators are more in the range of 1.87-3.77 grams/minute), nothing in my initial OR experience left me doubting it. In this niche, ULTRA Mini is best-in-class. If Medronic can just redesign the TruClear 5C or 5.0 hysteroscopes with glass-rod rather than fiber optic lens, the whole system would be close to perfect.

Innovation

While the bulk of users may not appreciate it, ULTRA Mini is an impressive innovative accomplishment. As these devices get smaller and smaller, the engineering challenges get exponentially greater. Reciprocating speeds, blade angles, tissue clearance etc. all have narrow tolerances with each component potentially killing performance. I have no idea exactly how the engineers used this combination of stainless stain tubes and blades with silicone and chromium coatings to make this device work but they did and they did it well.

Value

ULTRA Mini is not cheap. If fact, at $1,097 it is the Bentley of hysteroscopic instruments. That said, there are two considerations. First, nobody pays list. Second, we are talking value not cost. In that regard the real questions should be, "does this device allow surgeons to accomplish what they set out to accomplish, how efficiently were they able to do it and was it worth it?" In a recent meta-analysis, Shazly et al. demonstrate that as compared with hysteroscopic loop resections, hysteroscopic morcellation procedures were faster and more complete. So, depending on your hospital’s OR costs and your surgeons’ skill sets, this device may be a better value than it first appears. While this hardly ends the argument, I do think it is an important consideration when valuing this technology.

Summary

In my opinion, hysteroscopic mechanical morcellation is an evolving alternative to traditional loop resectoscopy that just got even more enticing with the introduction of the TruClear™ ULTRA Mini tissue removal device. With the combination of its small size and large tissue resecting potential, I think ULTRA Mini will alter the hysteroscopy landscape as surgeons assimilate this new technology’s potential into their practices.

REFERENCES


Uberlube

CONTINUED FROM PAGE 41

partners than prescription solutions and therefore, providers should be aware of what is on the shelves in this niche. One of those products is überlube.

According to company lore, in 2002 childhood friends Stephen Magnusen and Frank Zwergel came up with the idea of überlube with the intention of creating “a lightweight lubricant with log-lasting performance…that doesn’t leave a sticky residue.” Though they set out to make a lubricant with a broad variety of applications including massage oil, moisturizer, hair gel, lock grease or even shoe polish, überlube found its way into sex-product stores, where it soon became a “go to” for couples seeking a lubricant for using during sex.

Design/Functionality

Überlube has 4 ingredients: dimethicone, dimethiconol, cyclomethicone and tocopheryl acetate. The first 3 are all polymeric organosilicon compounds commonly referred to as silicones, and tocopheryl acetate is the ester of acetic acid and vitamin E. All the ingredients are non-toxic and can even be ingested. The formula naturally does not harbor bacteria, yeasts or molds so it needs no preservatives, alcohols or antimicrobial additives. It is sold in 3 sizes: a 14-mL travel size, a standard 50-mL clear spray bottle or
a larger 100-mL clear spray bottle.
In testing between my ungloved fingers and on my gloved fingers during bimanual exams, überlube had a silkier feel and was lubricious without being messy. In my non-scientific, uncontrolled, un-blinded survey of patients to whom I had recommended überlube as a lubricant option for intercourse with their partners, every one thought it was better than anything they had previously tried.

Innovation
Though I am no chemist, I am pretty sure überlube is different from almost everything else out there. Its combination of safety, excellent lubrication and lack of mess is unique and might earn it a spot in the lubricant hall of fame.

Value
For sexual lubricants, the value of the product has to be individualized because each person is going to have a different degree of discomfort and a different desire to fix the problem. That said, a 50-mL bottle of überlube at $18 is not the same financial commitment as investing in a 4-year college education, so I think it is money well spent on trying a bottle if GSM is a significant problem.

Summary
The world of lubricants goes well beyond car engines, bars and Washington, D.C. In the sexual lubricant niche, silicone-based überlube is a newer option that many patients may find helpful. A bottle sits on my desk for patients to sample and I have recommended it many times with many satisfied users.

REFERENCES

Dr Greenberg is Chief, Division of Gynecology, Brigham & Women’s Faulkner Hospital, and Associate Professor, Harvard Medical School, Boston, Massachusetts. He has no conflicts of interest to report in respect to the content of this article.
**Failure to diagnose breast cancer**

A 62-year-old Kentucky woman had been having routine mammograms since 2003. Between 2006 and 2010, her annual mammograms were read as normal by the same radiologist. In 2011 her mammogram was read by another radiologist as normal. A year later the woman’s mammogram showed several cancerous breast masses and the disease was found to have metastasized. She underwent a radical mastectomy and aggressive radiation, but her cancer was deemed incurable.

The woman sued the first radiologist, alleging that he misread her mammograms from 2006 to 2010. Her expert witness testified that in 2006, there was evidence of asymmetric density suggestive of cancer. The radiologist denied any negligence in reading the mammograms and contended that his interpretation was reasonable.

**THE VERDICT**
The jury returned a defense verdict.

**Blood vessels, bowel damaged in hysterectomy**

A 46-year-old woman underwent a laparoscopic hysterectomy performed by an Illinois gynecologist. During the operation, the iliac artery, iliac vein, and small bowel were lacerated during trocar placement. The patient suffered severe bleeding and had a cardiac arrest. She was given large amounts of blood and a surgeon repaired the blood vessels and bowel. The patient was subsequently discharged from the hospital but returned after 1 day with a complaint of thrombosis, which resulted in a requirement for blood thinners for 1 year. During the year after the original surgery, the patient was informed that she received blood that was HIV-positive. Her initial HIV test came back negative.

The woman sued the gynecologist and alleged he deviated from the standard of care by performing a “blind trocar insertion,” which caused major vessels to be more susceptible to injury. The gynecologist denied that any care was below the standard.

**THE VERDICT**
A $383,000 verdict was returned for the woman, including $200,000 for past and future pain and suffering, $5,000 for past and future loss of normal life, $168,000 for past and future medical expenses, and $5,000 for past and future loss of consortium.

**Delay in ovarian cancer diagnosis**

A 64-year-old Illinois woman presented to her primary care physician with complaints of worsening abdominal pain, fatigue, and unexplained weight loss. The physician diagnosed gastritis and the patient was treated for that. She then went to another physician, who did imaging studies that resulted in a diagnosis of Stage IV ovarian clear cell carcinoma.

The woman sued the primary care physician and alleged that the standard of care required him to order tests to assess her original complaints. She alleged that timely imaging would have diagnosed her ovarian cancer at Stage I or II, which has a 90% survival rate at 10 years, instead of at Stage IV, which has a survival rate of less than 10% at 10 years.

**THE VERDICT**
The case settled for $1.9 million before a complaint was filed.

**Rectovaginal fistula after delivery**

A 27-year-old Arizona woman suffered a perineal laceration during vaginal delivery of her first child. She subsequently developed a rectovaginal fistula which persisted for 6 months until it was surgically repaired and closed. As a result of developing a divot in the rectum, she suffers from fecal seepage, which she alleged is a permanent condition.

The woman sued the obstetrician and alleged that her care was below the standard and that she failed to perform a rectal examination after the laceration, which caused the fistula. The obstetrician argued that she correctly diagnosed and repaired the patient’s third-degree laceration, and claimed the wound later broke down for unknown reasons.

**THE VERDICT**
The jury returned a defense verdict.
Failure to promptly deliver large infant

A Washington woman was admitted to the hospital in labor in 2013. Her labor was complicated by very slow progress, fever, and several fetal heart rate abnormalities. Twenty-six hours later, she delivered by emergency cesarean an infant that weighed almost 11 lb. He was resuscitated and admitted to the neonatal intensive care unit with an arterial cord pH of 7.01 and a base excess of -14.4. He started to have seizures 9 days after birth. Placental pathology revealed infection of the placenta with Group B streptococcus. Magnetic resonance imaging showed brain damage and the infant was diagnosed with hypoxic-ischemic encephalopathy.

The woman sued those involved with the delivery and claimed they were negligent in failing to recognize that the fetus was excessively large and failed to deliver more quickly.

THE VERDICT The parties reached a $5.5 million settlement.

Infection following accidental needle stick

A Kansas woman underwent a forceps-assisted delivery, during which a third-degree laceration was noted and repaired. The woman complained of severe pain and the obstetrician performed a revision of the repair, after which the patient had immediate relief and was discharged.

During the revision operation the obstetrician accidentally stuck himself with a clean needle. He replaced the needle and changed his glove. Following the needle stick the physician’s thumb became red and swollen and he started antibiotics, but did not feel the need to inform the patient of the infection. Two days later the patient reported to her own doctor’s office with fever, pain, and foul order from the surgery site. She was diagnosed with pelvic incisional cellulitis and taken to the operating room for exploration and debridement. She was subsequently transferred to another hospital for episiotomy wound and abscess debridement. She then developed septic shock and necrotizing fasciitis and was placed on a ventilator. She eventually recovered but underwent 13 operations.

The woman sued the physician alleging that he should have informed her of the infection in his hand after the needle stick.

The obstetrician denied that he had any duty to inform her, and had not caused her infection complications.

THE VERDICT A defense verdict was returned.

Hypovolemic shock after cone biopsy

A 46-year-old Illinois woman suffered significant bleeding after undergoing a cervical cone biopsy. The gynecologist attempted to control the bleeding by injecting Monsel’s solution. The bleeding slowed but the patient went into hypovolemic shock, which necessitated an emergency laparotomy that revealed a perforated uterine wall and damage to both uterine arteries. A hysterectomy was performed to control the bleeding. The patient improved, but subsequently developed sepsis, small bowel necrosis, and other complications, resulting in her death.

A lawsuit was filed on behalf of the patient’s estate, alleging that the gynecologist was negligent in that an excessive amount of cervical tissue was removed during the cone biopsy and that Monsel’s solution was used inappropriately, which led to hypovolemic shock and ultimately the woman’s death.

THE VERDICT The jury awarded $4.25 million in damages.

Failure to recognize, treat preeclampsia

A 34-year-old Pennsylvania woman received prenatal care from a general practitioner. During the pregnancy, she developed gestational diabetes. She was admitted in the early third trimester with some bleeding, increased blood pressure, and headache, but was discharged home. At 34 weeks she was readmitted to the hospital with continuing headaches and spiking blood pressures. She lost consciousness and an obstetrician in the hospital delivered the baby. The woman suffered brain damage and subsequently died.

A lawsuit was filed by the woman’s estate and faulted the general practitioner and her group for failing to diagnose and treat preeclampsia and failing to refer her to an obstetrician. The physician also was alleged to be negligent in failing to come to the hospital after nurses advised her of the patient’s symptoms.

THE VERDICT The jury found in favor of the patient and awarded $6.07 million to her estate.
A BETTER PERIOD EXPERIENCE!

Enjoy 12 hour leak-free protection, comfort and convenience with The DivaCup.

EDUCATE YOUR PATIENTS
Order your FREE Resource Demo Kit today at divacup.com/resource

For information, call Wright’s Media at 877.652.5295 or visit our website at www.wrightsmedia.com

Content Licensing for Every Marketing Strategy

Marketing solutions fit for:
Outdoor | Direct Mail | Print Advertising | Tradeshow/POP Displays | Social Media | Radio & TV

Leverage branded content from Contemporary OB/GYN to create a more powerful and sophisticated statement about your product, service, or company in your next marketing campaign. Contact Wright’s Media to find out more about how we can customize your acknowledgements and recognitions to enhance your marketing strategies.

For information, call Wright’s Media at 877.652.5295 or visit our website at www.wrightsmedia.com
Cleveland Clinic Obstetrics/Gynecology & Women's Health Institute

Controversies in Endometriosis, Adenomyosis and Fibroids

August 25 – 26, 2017
InterContinental Hotel and Bank of America Conference Center, Cleveland, OH

Discover the latest advances in the diagnosis and management of endometriosis, adenomyosis and fibroids. Learn from leading experts as they discuss the controversies in a highly interactive program with case presentations, surgical videos and panel discussions.

Key Features
- Find out strategies to optimize imaging for pre-operative diagnosis of endometriosis, adenomyosis and fibroids.
- Learn what’s new with surgical and medical approaches to management of these conditions in patients with infertility and pain.
- Incorporate treatment algorithms into your clinical practice.

Program Directors
Rosanne Kho, MD
Director, Benign Surgery
Women’s Health Institute
Department of Gynecology and Obstetrics
Cleveland Clinic
Cleveland, OH

Mary Jean Uy-Kroh, MD
Women’s Health Institute
Department of Gynecology and Obstetrics
Cleveland Clinic
Cleveland, OH

This activity has been approved for AMA PRA Category 1 Credits™.

Learn more! cfcme.org/17endom

EXAMPro®
YOUR ANSWER TO THE BOARDS

1 DAY COURSE
CASE LIST CONSTRUCTION
LIVE & ONLINE
WITH THE NEW ABOG SOFTWARE, NOW MORE THAN EVER,
LEARN HOW TO CONSTRUCT YOUR CASE LIST
TO GENERATE THE QUESTIONS YOU WANT!

BE A PART OF DR. SCHAMROTH’S
FREE BI-WEEKLY TELESEMINARS
EMAIL INFO@EXAMPRO.COM TO GET DIAL-IN INFORMATION

410.580.2970 | exampro.com

Place a recruitment ad in Contemporary OB/GYN.
Joanna Shippoli • National Account Manager, Healthcare Careers • (440) 891-4569 • joanna.shippoli@ubm.com
CAREERS

For Recruitment Advertising, contact: Joanna Shippoli
(800) 225-4569 ext. 2615, joanna.shippoli@ubm.com

Position available for board certified or eligible OBGYN physician for profitable private practice 25 minutes outside of Atlanta, GA.

We offer a competitive salary, exceptional benefits, retirement package and easy terms to partnership and ownership of the practice. Compensation commensurate with training and experience.

Please submit letter of intent, CV, and three references to:
Dr. Christine Holschneider
Chair, Department of Obstetrics and Gynecology
Olive View-UCLA Medical Center
14445 Olive View Drive, 6D-116
Sylmar, CA, 91342
Fax: (818) 364-3255
Email: cholschneider@dhs.lacounty.gov

OB/GYN PHYSICIAN

Olive View-UCLA Medical Center, a Los Angeles County facility and major teaching hospital for the David Geffen School of Medicine at UCLA, is recruiting a full-time BC/BE general obstetrician/gynecologist.

We are seeking individuals who will contribute to an academic, energetic and creative multidisciplinary faculty. Responsibilities include direct patient care with strong emphasis on mentoring and training residents in the UCLA Ob/Gyn Residency Program, as well as the teaching of medical students. Opportunities in clinical and health services research are available and encouraged. Employment includes an academic appointment at the David Geffen School of Medicine at UCLA. Competitive salary and benefits provided. Applicants at the level of Assistant or Associate Professor will be considered. This is an excellent opportunity in sunny Southern California for interested academicians. Applicant must be eligible for licensure in California. EOE

Please submit letter of intent, CV, and three references to:
Dr. Christine Holschneider
Chair, Department of Obstetrics and Gynecology
Olive View-UCLA Medical Center
14445 Olive View Drive, 6D-116
Sylmar, CA, 91342
Fax: (818) 364-3255
Email: cholschneider@dhs.lacounty.gov

OB/GYN PHYSICIAN

Position available for board certified or eligible OB/GYN physician for profitable private practice 25 minutes outside of Atlanta, GA.

We offer a competitive salary, exceptional benefits, retirement package and easy terms to partnership and ownership of the practice. Compensation commensurate with training and experience.

Please submit your CV to:
Kruti Patel
Phone: 770-771-5235
Email: kpatel@docvera.com

OBSTETRICS/GYNECOLOGY PHYSICIAN

Physician owned OB-GYN group in Anchorage Alaska seeks Board Eligible OB-GYN physician to join us in a thriving practice. AWH is a well-established OB GYN practice currently with 10 providers. We offer full obstetrics, gynecology, and urogynecology services.

Competitive competition package including production incentive pay, CME dollars, moving expenses, and 7 weeks’ vacation annually. Other benefits include malpractice coverage, health/dental insurance, 401K, and a cell phone. Opportunity for partnership is available after 2 full years.

Please contact Cindy Alkire at (907) 339-1632 or calkire@akwomenshealth.com

Reach your target audience. Our audience.

Contemporary OB/GYN

Joanna Shippoli Account Manager
440-991-2615 | joanna.shippoli@ubm.com

Repeating an ad ENSURES it will be seen and remembered!
Join our OB/GYN Hospitalist team at Mercy Medical Center in Merced, California!

- Put the passion back into practicing medicine
- Full-time Physician opportunities
- Full-time entails just eight 24-hour shifts/month
- Gain freedom and flexibility
- Partner with TeamHealth, the industry leader in providing integrated hospital-based services
- We offer competitive pay
- Grow professionally through CME and training created and provided by the TeamHealth Institute
- Paid PLI with tail coverage provided by A+-rated carrier

Located in the heart of California’s Central Valley, Merced offers abundant shopping, pleasant neighborhoods and tree-lined streets. Bicycle paths along creeks link major City parks. Merced’s revitalized downtown is emerging as the entertainment center of the area. Annual events and festivals bring regional and even national recognition. Merced’s Valley location southeast of San Francisco provides easy access to the central California coast, Sierra Nevada Mountains and national parks, and major cities. Enjoy short drives to skiing, beaches, fishing, and other outdoor attractions!

To learn more about these or other opportunities, contact Jon Goldsmith at 954.377.3081 or jon.goldsmit@teamhealth.com, or visit www.teamhealth.com.

MICHIGAN

SOUTH CENTRAL MICHIGAN LAKE COMMUNITY

Hospital employed general obgyn position joining well established 2 Obgyn and 1 WHNP practice in desirable south central Michigan family oriented resort Lake community 1 hr to Ft. Wayne and Lansing associated with financially stable 87 bed hospital with modern L/D with 3 LDR’s and C-section room on floor. 1-3 call. H1b and J-1 Visa sponsor. Excellent negotiable $300K salary, signing bonus, production bonus, benefits, relocation and student loan repayment.

OBGYN SEARCH
314-984-0624 | obgynsrc@aol.com | www.obgynsrc.com

Narrow your candidate search to the best.
Place a recruitment ad in Contemporary OB/GYN.

Joanna Shippoli
National Account Manager, Healthcare Careers
(440) 891-4569 • joanna.shippol@ubm.com

CALIFORNIA

TEAMHealth

CLINICAL ASSISTANT PROFESSOR ATTENDING PHYSICIAN

The Department of Obstetrics and Gynecology at SUNY Downstate, one of the nation’s leading urban medical centers, located in Brooklyn, NY is seeking to recruit an Attending Physician at the Clinical Assistant Professor level.

Core Responsibilities:
The responsibilities of this full-time faculty physician will include:
Alternating services in: Labor and Delivery, Outpatient Clinic, Surgical Procedures, Supervision of Obstetrics and Gynecology Residents and teaching Medical Students.

Core Requirements:
Applicant must be Board Eligible/Board Certified in Obstetrics and Gynecology with a New York State Licence to practice Medicine.

To Apply: Please send CV and Cover Letter to:
Ovadia Abulafia, M.D.
Professor and Chairman
Department of Obstetrics and Gynecology
SUNY - Downstate Medical Center
450 Clarkson Avenue - MSC 24
Brooklyn, NY 11203
Telephone: (718) 270-2081
Ovadia.Abulafia@Downstate.edu
An Equal Opportunity Employer

TEAMHealth

LEAD OUR OB/GYN HOSPITALIST TEAM AT WOMEN’S CHRISTIAN ASSOCIATION HOSPITAL IN JAMESTOWN, NEW YORK!

- Put the passion back into practicing medicine
- Medical Director opening
- Gain freedom and flexibility
- Partner with TeamHealth, the industry leader in providing integrated hospital-based services
- We offer competitive pay
- Grow professionally through CME and training created and provided by the TeamHealth Institute
- Paid PLI with tail coverage provided by A+-rated carrier

Jamestown offers all the advantages of city living combined with the beauty and recreational opportunities of the rural experience including nearby ski resorts, acclaimed golf courses, nature preserves and water sports on Chautauqua Lake, Shops, dining, entertainment, affordable homes of great character, and so much more are part of the urban experience. Excellent schools and colleges, abundant arts education and performance opportunities, and safe and friendly neighborhoods make Jamestown a wonderful community to call home.

To learn more about these and other opportunities, contact Heather Scott at 954.835.2844 or Heather.Scott@teamhealth.com or visit www.teamhealth.com.
Independent OB/GYN practice of 5 MDs and 1 NP is seeking an OB/GYN physician to practice in the Tidewater area. 30 minutes from the beach. Call 1/4. Competitive salary and benefits.

Please email CV to gb@greenbrierob.hcoxmail.com

Intermountain is frequently referenced nationally as one of the leaders in delivering high quality/low cost healthcare. Intermountain Healthcare needs OB/GYN’s in multiple cities throughout Utah. Contact: Physician Recruiting, 800-888-3134, physicanrecruit@mail.org, http://physicianjobsutah.org

Reach your target audience.

Our audience.

Women's health professionals. Contact me today to place your ad.

Joanna Shippoli
Account Manager
440-891-2615
joanna.shippoli@ubm.com

ADVERTISER INDEX

To obtain additional information about products and services advertised in this issue, use the contact information below. This index is provided as an additional service. The publisher does not assume any liability for errors or omissions.

ASPIRA LABS, A VERMILLION COMPANY
OVA1 ...................................................... 29
www.aspiralab.com

CHG HEALTHCARE
COMPHEALTH ........................................... 41
www.comphealth.com

COOPER SURGICAL
ACTIM PROM ........................................... 25
www.coopersurgical.com

ADVINCUA ARCH ................................. 33
www.coopersurgical.com

ENDOSEE .............................................. 14, 15
www.coopersurgical.com

HOLOGIC
APTIMA .................................................. 45
www.hologic.com

LABCORP
NuSwab ................................................. 3
www.labcorp.com

PREGNANCY ......................................... 19
www.labcorp.com

LUPIN PHARMACEUTICALS
METHERGINE ................................. 9, 10
www.lupinpharmaceuticals.com

QUEST DIAGNOSTICS
WOMEN’S HEALTH ......................... CV4
www.k-y.com

ROCHE DIAGNOSTICS CORP
HARMONY ........................................... 5
www.harmonylittestusa.com

THERAPEUTICS MD
TX004HR ........................................... 36, 37
www.wwalnurts.com
IUD blamed for multiple miscarriages

Was caregiver negligence the proximate cause of the deaths?

An ob/gyn implanted an intrauterine device (IUD) in a Missouri woman in 2005. A month later, the device could not be located on ultrasound and the ob/gyn believed it had been expelled from the patient’s body. The woman suffered 3 miscarriages between 2009 and 2011 and asked her gynecologist if the missing IUD, which she never observed exiting her body, could be contributing to the miscarriages. She was reportedly told that the device was not present. The IUD was eventually seen on an abdominal x-ray in 2013 after the patient switched doctors. After the IUD was removed the patient had a successful pregnancy.

The woman sued the original ob/gyn and the clinic for personal injury and wrongful death of the unborn fetuses. Her experts testified that the time line of the miscarriages was consistent with their causation theory and it was below the standard of care to not perform an abdominal x-ray when the IUD position could not be found.

The gynecologist argued that the American College of Obstetricians and Gynecologists guidelines at the time did not specify that an x-ray was required, although such a guideline was added later. They claimed that the IUD did not cause the miscarriages and instead that the fetal tissue showed abnormalities not attributable to the IUD.

The jury awarded the patient $488,157 on the injury claim, $470,000 of which was for noneconomic damages.

VERDICT

For more Legally Speaking cases turn to page 46

- Missed breast cancer diagnosis
- Hypovolemic shock after cone biopsy
- Rectovaginal fistula follows laceration repair
- Infection following accidental needle stick
- Settlement after failure to promptly deliver large infant
- Blood vessel, bowel damage after hysterectomy

Ms Collins is an attorney specializing in medical malpractice in Long Beach, California. She can be reached at dawncfree@gmail.com.
Her specimen has a story.

We’re committed to telling it with the utmost accuracy.

From every routine screen to every specialty test, we pursue the highest quality standards in women’s health diagnostics. Learn more about our unwavering commitment to you and your patients at QuestDiagnostics.com/OBGYN.

Because at Quest Diagnostics, we see more than specimens. We see lives.