

MAY 2012 ■ Volume 206, Number 5


EDITORIALS

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The Editors

364 The new *American Journal of Obstetrics & Gynecology*, 5 years later: looking back and moving forward
Roberto Romero; Thomas J. Garite; Moon H. Kim; E. J. Quilligan; Richard C. Bump; Sandra A. Carson; Larry J. Copeland; William A. Grobman; Jay D. Iams; Todd R. Jenkins; Sarah J. Kilpatrick; George A. Macones; Samuel Parry; Maureen G. Phipps
➤ See related editorial, page 363

374 Maternal-fetal care starts and ends with the mother
Britton D. Rink
➤ See related article, page 409

SMFM CLINICAL GUIDELINE

376 Progesterone and preterm birth prevention: translating clinical trials data into clinical practice
 Society for Maternal-Fetal Medicine Publications Committee, with the assistance of Vincenzo Berghella, MD

EXPERT REVIEWS

OBSTETRICS

387 Oversight of elective early term deliveries: avoiding unintended consequences

PATIENT SAFETY SERIES

Steven L. Clark; Janet A. Meyers; Jonathan B. Perlin

Policies to reduce elective early term deliveries must be developed so that those fetuses in whom medical complications warrant early delivery are not endangered.

(continued)



The “Fast Track” symbol next to listings in the Table of Contents of this issue identifies papers presented at the February 2012 meeting of the Society for Maternal-Fetal Medicine and sped to press for the benefit of our readers. More papers from the meeting will appear in future issues.

ON THE COVER



From its beginnings as The American Journal of Obstetrics and Diseases of Women and Children in 1869, later renamed the American Journal of Obstetrics & Gynecology in 1920 and continuing today, the Journal recently expanded its electronic presence with a new app for the iPad. *Editorial, page 364.*

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GLOSSARY OF SYMBOLS

Editors' Choice



Articles selected by the editors for special notice

Editors' Commentary



Explains the significance of an Editors' Choice article

Journal Club



Discussion of a research article in this issue

Cross-reference



Identifies interrelated articles

Fast-Track articles



Research articles sped to publication for the benefit of our readers

Supplemental material



A video clip, slides, or other supporting didactic information is available



at www.AJOG.org

Online-only articles



Article appears only at www.AJOG.org

Articles in full



A reminder that all articles summarized in AJOG are posted in full at www.AJOG.org

EXPERT REVIEWS *(continued)*

ONCOLOGY

390 Gynecologic care for breast cancer survivors: assisting in the transition to wellness

Ritu Salani; Barbara L. Andersen

Millions of survivors of breast cancer transition from oncology to obstetrics/gynecology providers with needs of surveillance, management of late effects, and referral for psychologic/behavioral care.

CLINICAL OPINION

OBSTETRICS

398 Preventing Low Birthweight: 25 years, prenatal risk, and the failure to reinvent prenatal care

Elizabeth E. Krans; Matthew M. Davis

Risk-appropriate prenatal care may improve the effectiveness of prenatal care for high-risk patients and the efficiency of prenatal care delivery for low-risk patients.

MEETING PAPERS



SELECTED FAST-TRACK PAPERS FROM THE 32ND ANNUAL MEETING (THE PREGNANCY MEETING) OF THE SOCIETY FOR MATERNAL-FETAL MEDICINE

404 The effect of a mediolateral episiotomy during operative vaginal delivery on the risk of developing obstetrical anal sphincter injuries



Joey de Vogel; Anneke van der Leeuw-van Beek; Dirk Gietelink; Marijana Vujkovic; Jan Willem de Leeuw; Jeroen van Bavel; Dimitri Papatsonis

We found a 6-fold decreased odds for developing obstetric anal sphincter injury when a mediolateral episiotomy was performed during operative vaginal delivery.

406 Effects on (neuro)developmental and behavioral outcome at 2 years of age of induced labor compared with expectant management in intrauterine growth-restricted infants: long-term outcomes of the DIGITAT trial



Linda van Wyk; Kim E. Boers; Joris A. M. van der Post; Maria G. van Pampus; Aleid G. van Wassenaer; Anneloes L. van Baar; Marc E. A. Spaanderdam; Jeroen H. Becker; Anneke Kwee; Johannes J. Duvekot; Henk A. Bremer; Friso M. C. Delemarre; Kitty W. M. Bloemenkamp; Christianne J. M. de Groot; Christine Willekes; Frans J. M. E. Roumen; Jan M. M. van Lith; Ben W. J. Mol; Saskia le Cessie; Sicco A. Scherjon; for the DIGITAT Study Group

There are no differences in long-term neurodevelopmental or behavioral outcome in children born after intrauterine growth restriction at term for a policy of induction of labor when compared to expectant management.

(continued on page 4A)



The article summaries that appear in the Journal are abbreviated versions of Research and Clinical Opinion articles published in full on the Journal's website at www.AJOG.org. While the great majority of these summaries are written by Journal staff and all are approved by the bylined authors and Journal editors, some summaries are written by the original authors and prepared for publication by Journal staff.

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RESEARCH

OBSTETRICS

409 Prenatally diagnosed fetal conditions in the age of fetal care: does who counsels matter?



Stephen D. Brown; Jeffrey L. Ecker; Johanna R. M. Ward; Elkan F. Halpern; Sadath A. Sayeed; Terry L. Buchmiller; Christine Mitchell; Karen Donelan
Significant differences in counseling attitudes and practices exist between obstetric and pediatric specialists for some congenital fetal conditions, which may affect the provision of care.

EDITORS' COMMENTARY: Dr Stephen Brown and colleagues looked at an important aspect of perinatal care that has not received sufficient attention: the attitudes of caregivers who provide counseling to women with prenatally detected abnormalities. We asked Dr Britton Rink to comment.



See related editorial, page 374

412 A comparison of surface acquired uterine electromyography and intrauterine pressure catheter to assess uterine activity



Gabi Haran; Michal Elbaz; Moshe D. Fejgin; Tal Biron-Shental
Electrical uterine electromyography yields information about uterine contractility comparable to that obtained with an intrauterine pressure catheter.



See Journal Club, page 449

415 The effect of CenteringPregnancy group prenatal care on preterm birth in a low-income population



Amy H. Picklesimer; Deborah Billings; Nathan Hale; Dawn Blackhurst; Sarah Covington-Kolb

Group prenatal care resulted in lower rates of preterm birth and decreases in the racial disparity that is associated with premature delivery compared with traditional prenatal care.

EDITORS' COMMENTARY: This report on pregnancy outcomes in low-income women who were enrolled in a specialized group-oriented program of prenatal care is long overdue. We hope that others will study and report outcomes for similar programs in other populations.

417 Maternal superobesity and perinatal outcomes

Nicole E. Marshall; Camelia Guild; Yvonne W. Cheng; Aaron B. Caughey; Donna R. Halloran

Superobese women (body mass index, ≥ 50 kg/m²) are at significantly increased risk for poor perinatal outcomes compared with obese women with a lower body mass index.

419 Changes in labor patterns over 50 years

S. Katherine Laughon; D. Ware Branch; Julie Beaver; Jun Zhang

Despite considerable changes in maternal characteristics since the 1960s, practice patterns contributed greatly to the longer labor durations in a modern obstetrical cohort.

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Gynecologic ultrasound

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RESEARCH *(continued from page 4A)*

422 Fetal male gender and the benefits of treatment of mild gestational diabetes mellitus

Ray O. Bahado-Singh; Lisa Mele; Mark B. Landon; Susan M. Ramin; Marshall W. Carpenter; Brian Casey; Ronald J. Wapner; Michael W. Varner; Dwight J. Rouse; John M. Thorp Jr; Anthony Sciscione; Patrick Catalano; Margaret Harper; George Saade; Steve N. Caritis; Alan M. Peaceman; Jorge E. Tolosa; for the Eunice Kennedy Shriver National Institute of Child Health and Human Development Maternal-Fetal Medicine Units Network
The beneficial effects of treatment of mild gestational diabetes mellitus in the reduction of birthweight and neonatal fat mass is greater among male fetuses.

425 Cerclage for cervical shortening at fetoscopic laser photocoagulation in twin-twin transfusion syndrome

Ramesha Papanna; Mounira Habli; Ahmet A. Baschat; Michael Bebbington; Lovepreet K. Mann; Anthony Johnson; Greg Ryan; Martin Walker; David Lewis; Christopher Harman; Timothy Crombleholme; Kenneth J. Moise Jr
Cerclage for cervical shortening at fetoscopic laser photocoagulation in twin-twin transfusion syndrome remains questionable.

428 Prepregnancy obesity and complement system activation in early pregnancy and the subsequent development of preeclampsia

Anne M. Lynch; Robert H. Eckel; James R. Murphy; Ronald S. Gibbs; Nancy A. West; Patricia C. Giclas; Jane E. Salmon; V. Michael Holers
This study represents the use of complement biomarkers in early pregnancy in combination with obesity in the risk assessment of women for the development of preeclampsia in pregnancy.

431 Improving patient understanding of preeclampsia: a randomized controlled trial

Whitney B. You; Michael S. Wolf; Stacy C. Bailey; William A. Grobman
Patients who were exposed to a graphics-based educational tool demonstrated superior preeclampsia-related knowledge, compared with those patients who were exposed to standard materials or no education.

UROGYNECOLOGY

433 Cost minimization analysis of laparoscopic sacral colpopexy and total vaginal mesh

Christopher F. Maher; Luke B. Connelly
Laparoscopic sacral colpopexy has a lower clinical, opportunity, reoperation, and total economic cost than the total vaginal mesh in the management of vault prolapse.

435 Symptomatic and anatomic 1-year outcomes after robotic and abdominal sacrocolpopexy

Nazema Y. Siddiqui; Elizabeth J. Geller; Anthony G. Visco
One year after surgery, women experience similar symptomatic and anatomic success after robotic vs open abdominal sacrocolpopexy.

(continued on page 9A)

RESEARCH (continued from page 6A)**438** Effect of surgical approach on physical activity and pain control after sacral colpopexy

Sarah A. Collins; Paul K. Tulikangas; David M. O'Sullivan

Women undergoing robotic sacral colpopexy do not return to baseline physical activity faster or have better pain control than women undergoing abdominal sacral colpopexy.

440 Outcomes and predictors of failure of trocar-guided vaginal mesh surgery for pelvic organ prolapse

Alfredo L. Milani; Mariella I. J. Withagen; Mark E. Vierhout

Success of prolapse surgery depends on outcome definition; the combined anterior and posterior mesh with the uterus in situ is a risk factor for failure in all outcomes.

442 Interrater reliability of the International Continence Society and International Urogynecological Association (ICS/IUGA) classification system for mesh-related complications

Elena Tunitsky; Sara Abbott; Matthew D. Barber

The current form of the International Continence Society/International Urogynecological Association classification system has poor interrater reliability and significant limitations that make it difficult to recommend its widespread adoption.

444 Pharmacologic treatment for urgency-predominant urinary incontinence in women diagnosed using a simplified algorithm: a randomized trial

Alison J. Huang; Rachel Hess; Lily A. Arya; Holly E. Richter; Leslee L. Subak; Catherine S. Bradley; Rebecca G. Rogers; Deborah L. Myers; Karen C. Johnson; W. Thomas Gregory; Stephen R. Kraus; Michael Schembri; Jeanette S. Brown

Among ambulatory women with urgency-predominant incontinence that was diagnosed with the use of a 3-item questionnaire rather than an extended evaluation, pharmacologic therapy decreased incontinence frequency without increasing serious adverse events.

BASIC SCIENCE: GYNECOLOGY**447** Comprehensive analysis of *LAMC1* genetic variants in advanced pelvic organ prolapse

Jennifer M. Wu; Anthony G. Visco; Elizabeth A. Grass; Damian M. Craig; Rebekah G. Fulton; Carol Haynes; Cindy L. Amundsen; Svati H. Shah

Laminin gamma-1 (*LAMC1*) is a potential candidate gene for pelvic organ prolapse, given its biological plausibility and previous association with advanced pelvic organ prolapse.

BASIC SCIENCE: OBSTETRICS**447** A novel bridge between oxidative stress and immunity: the interaction between hydrogen peroxide and human leukocyte antigen G in placental trophoblasts during preeclampsia

Xue Zhou; Guo-ying Zhang; Jue Wang; Shou-lian Lu; Jun Cao; Li-zhou Sun

High levels of hydrogen peroxide can down-regulate human leukocyte antigen G expression in placental trophoblasts and trophoblast cells expressing human leukocyte antigen G are vulnerable to oxidative stress in preeclampsia.

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RESEARCH *(continued from page 9A)*

- 447** The impact of drug metabolizing enzyme polymorphisms on outcomes after antenatal corticosteroid use
David M. Haas; Amalia S. Lehmann; Todd Skaar; Santosh Philips; Catherine L. McCormick; Kyle Beagle; Scott J. Hebbring; Jessica Dantzer; Lang Li; Jeesun Jung
Genetic polymorphisms are associated with neonatal respiratory distress syndrome incidence after betamethasone therapy.
- 448** SOD1 suppresses maternal hyperglycemia-increased iNOS expression and consequent nitrosative stress in diabetic embryopathy
Hongbo Weng; Xuezheng Li; E. Albert Reece; Peixin Yang
Overexpression of copper zinc superoxide dismutase 1 blocks maternal hyperglycemia-increased inducible nitric oxide synthase expression, nitrosative stress, and apoptosis.
- 448** Human amnion epithelial cells reduce ventilation-induced preterm lung injury in fetal sheep
Ryan J. Hodges; Graham Jenkin; Stuart B. Hooper; Beth Allison; Rebecca Lim; Hayley Dickinson; Suzie L. Miller; Patricia Vosdoganes; Euan M. Wallace
Undifferentiated human amnion epithelial cells prevented preterm lung injury in a ventilation-induced sheep model of bronchopulmonary dysplasia by modulation of the host inflammatory response.



JOURNAL CLUB

- 449** A new method for assessing uterine activity: Haran et al
George A. Macones, Associate Editor
In a new study, uterine electromyography, a novel, noninvasive, fetal monitoring technique, and the intrauterine pressure catheter provided very similar data when used to track labor. Journal Club participants were impressed by the very high correlations between the methods. They agreed that the device is very promising, though much more research is needed.
- See related article, page 412 and full discussion, page e1

IMAGES IN GYNECOLOGY

- 450** In the nick of time
Emily S. Miller; Kathryn Marko; Leeber Cohen; Jeffrey S. Dungan; Lee P. Shulman
The patient became pregnant through intrauterine insemination, but the fetus was developing in her cervix. Two treatments with methotrexate failed to resolve the ectopic pregnancy.


RECRUITMENT & EMPLOYMENT OPPORTUNITIES


- 17A** Classified advertising

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JOURNAL CLUB ROUNDTABLE

 **Discussion: 'A new method for assessing uterine activity' by Haran et al**
 Moderator: George A. Macones; discussants: Alison Cahill; David M. Stamilio; Anthony Odibo

 A new study indicates that uterine electromyography, a novel method for tracking the progression of labor, could provide the accuracy of current fetal monitoring techniques while overcoming their drawbacks. Journal Club members, excited by the prospect of this technology, were impressed by how well the device stacked up against the current gold standard.

 See related articles, pages 412 and 449

LETTERS TO THE EDITORS

 **Decreased brachial plexus palsy after institution of shoulder dystocia protocol**

Russ Jelsema

Reply, page e3

William A. Grobman

 **Lymphadenectomy in endometrial cancer: what's the right question?**

Stefano Basile; Maria Giovanna Salerno; Pierluigi Benedetti Panici

Reply, page e4

Charu Sharma; Israel Deutsch; Thomas J. Herzog; Jason D. Wright

 **Safety and efficiency of multiple square sutures to avoid peripartum hysterectomy**

Souhail Alouini; Louis Mesnard

Reply, page e5

Brian T. Bateman; William M. Callaghan; Elena V. Kuklina

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