

MAY 2019 ■ Volume 220, Number 5

EDITORIALS

413 Sarah J. Kilpatrick, MD, PhD, Editor for *AJOG*
Roberto Romero

417 Fertility-sparing surgery for early-stage cervical cancer: does surgical approach have an impact on disease outcomes?
Kristin L. Bixel; Jeffrey M. Fowler
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GIANTS IN OBSTETRICS AND GYNECOLOGY

420 Giants in Obstetrics and Gynecology Series: a profile of Christopher Redman, MB, BChir, MRCP, FRCP
Roberto Romero

EXPERT REVIEWS

428 Magnetic resonance imaging for prenatal estimation of birthweight in pregnancy: review of available data, techniques, and future perspectives
Caroline Kadji; Mieke M. Cannie; Serena Resta; David Guez; Fouad Abi-Khalil; Riccardo De Angelis; Jacques C. Jani
Magnetic resonance imaging performs better than 2-dimensional ultrasound imaging in the estimation of fetal weight but has not been used currently in a clinical setting. The available data, measurement techniques, and future perspectives of this challenging technique are reviewed.

(continued)

 Selected papers presented at the February 2019 meeting of the Society for Maternal-Fetal Medicine and sped to press for the benefit of our readers.

Original research articles, whose abstracts appear in this issue, are posted in full at ajog.org

AJOG CITATION CLASSICS

High blood pressure in pregnancy

A 10-year update of a 1990 report from the National Heart, Lung, and Blood Institute's National High Blood Pressure Education Program Working Group on High Blood Pressure in Pregnancy¹ became the second most frequently cited *AJOG* article of all time, cited 1,919 times as of April 3, 2019.

The revision focused on "classification, pathophysiologic features, and management of the hypertensive disorders of pregnancy," using "a combination of evidence-based medicine and consensus" to update "contemporary approaches to hypertension control during pregnancy by expanding on recommendations made in the Sixth Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure." Topics included management of chronic hypertension vs preeclampsia, management of women with comorbid conditions, and the use of medication and dietary supplements to prevent preeclampsia.

The article, published in July 2000, is available at ajog.org. Click the "Collections" tab, then "AJOG Citation Classics."

REFERENCE

1. National High Blood Pressure Education Program Working Group on High Blood Pressure in Pregnancy. Report of the National High Blood Pressure Education Program Working Group on High Blood Pressure in Pregnancy. *Am J Obstet Gynecol* 2000;183:S1-S22.

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Glossary of Symbols

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Articles selected by the editors for special notice

SMFM papers



Articles from the Society for Maternal–Fetal Medicine

Fast-Track papers



Research articles from the latest SMFM meeting, sped to press

IDSOG papers



Articles from the Infectious Diseases Society for Obstetrics and Gynecology

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Original research articles, whose abstracts appear in this issue, are posted in full at ajog.org

SUBMISSION TO ONLINE PUBLICATION: ~3.5 MONTHS

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SYSTEMATIC REVIEWS

440 Levonorgestrel intrauterine system associated amenorrhea: a systematic review and metaanalysis

Jill E. Sergison; Lauren Y. Maldonado; Xiaoming Gao; David Hubacher

This systematic review and metaanalysis provides composite amenorrhea estimates for first-year Levonorgestrel Intrauterine System use that validate existing and provide new measures to guide informed method selection.

449 Diagnostic performance of third-trimester ultrasound for the prediction of late-onset fetal growth restriction: a systematic review and meta-analysis



Javier Caradeux; Raigam J. Martinez-Portilla; Anna Peguero; Alexandros Sotiriadis; Francesc Figueras

Third-trimester ultrasound screening for late-onset fetal growth restriction seems better when based on abdominal circumference, conducted near 37 weeks, and targets true fetal growth restriction.

CLINICAL OPINION

460 Does surgical treatment of atypical endometrial hyperplasia require referral to a gynecologic oncologist?

David I. Shalowitz; Alexandra Goodwin; Nicholas Schoenbachler

Selective referral of patients to nononcologic gynecologic surgeons for surgical treatment of atypical endometrial hyperplasia may offer increased access to care without compromising clinical outcomes.

VIEWPOINT

465 Trauma in Pregnancy: A Comprehensive Approach to the Mother and Fetus

Brian MacArthur; Michael Foley; Kendra Gray; Amy Sisley

A standardized fetal survey that integrates with the Advanced Trauma Life Support algorithm may improve the reliability of the evaluation of trauma in pregnancy.

ORIGINAL RESEARCH

Articles abstracted in this issue appear in full at ajog.org

GYNECOLOGY

469 Trachelectomy for reproductive-aged women with early-stage cervical cancer: minimally invasive surgery versus laparotomy



Koji Matsuo; Ling Chen; Rachel S. Mandelbaum; Alexander Melamed; Lynda D. Roman; Jason D. Wright

The minimally invasive approach has become the dominant modality for trachelectomy in reproductive-aged women with stage IA2-IB cervical cancer, but effects on survival remain unknown.

➤ Related editorial, page 417

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ORIGINAL RESEARCH (continued from page 6A)

- 471** Are fibroid and bony pelvis characteristics associated with urinary and pelvic symptom severity?
Robyn K. Shaffer; Amy D. Dobberfuhl; Kim-Nhien Vu; Angela M. Fast; Susan Dababou; Cristina Marrochio; Deirdre A. Lum; David M. Hovsepian; Pejman Ghanouni; Bertha Chen
We present demographic and clinical associations with fibroid tumor symptom severity; pelvic floor symptoms are not related to uterine size, fibroid location, or bony pelvis dimensions.
- 473** Increased risk of incident chronic medical conditions in infertile women: analysis of US claims data
Gayathree Murugappan; Shufeng Li; Ruth B. Lathi; Valerie L. Baker; Michael L. Eisenberg
While the absolute risk of chronic disease is low, infertility is associated with an increased risk of incident chronic disease compared with a group of noninfertile women.
- 476** Association between obesity and bacterial vaginosis as assessed by Nugent score
Rita T. Brookheart; Warren G. Lewis; Jeffrey F. Peipert; Amanda L. Lewis; Jenifer E. Allsworth
Obese and overweight women exhibit higher Nugent scores and an increased prevalence of bacterial vaginosis than lean women.
- 478** Risk factors for surgical intervention of early medical abortion
Amani Meaidi; Sarah Friedrich; Thomas Alexander Gerds; Oejvind Lidegaard
A nationwide cohort study, identifying and quantifying gestational age, maternal age, and reproductive history as risk factors for surgical intervention of early medical abortion.
- 480** Deregulation of miR-324/KISS1/kisspeptin in early ectopic pregnancy: mechanistic findings with clinical and diagnostic implications
Antonio Romero-Ruiz; Maria S. Avendaño; Francisco Dominguez; Teresa Lozoya; Helena Molina-Abril; Susana Sangiao-Alvarellos; Marta Gurra; Maribel Lara-Chica; Manuel Fernandez-Sanchez; Encarnación Torres-Jimenez; Cecilia Perdices-Lopez; Ali Abbara; Liliana Steffani; Marco A. Calzado; Waljit S. Dhillon; Antonio Pellicer; Manuel Tena-Sempere
We report that ectopic pregnancy is associated with deregulation of miR-324-3p and kisspeptin levels, features that may be relevant for pathogenesis and improved early diagnosis.
- OBSTETRICS**
- 482** Delayed clamping vs milking of umbilical cord in preterm infants: a randomized controlled trial
 Samantha K. Shirk; Stephanie A. Manolis; Donna S. Lambers; Kathleen L. Smith
This study was a randomized controlled trial that evaluated delayed clamping vs cord milking in preterm infants with no statistically significant difference in neonatal outcomes.

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ORIGINAL RESEARCH *(continued from page 8A)*

484 Maternal outcomes by race during postpartum readmissions



Aleha Aziz; Cynthia Gyamfi-Bannerman; Zainab Siddiq; Jason D. Wright; Dena Goffman; Jean-Ju Sheen; Mary E. D'Alton; Alexander M. Friedman
Black women were more likely to be readmitted postpartum, to experience severe morbidity when readmission occurred, and to experience life-threatening complications such as pulmonary edema and heart failure.

486 Prediction of small for gestational age neonates: screening by maternal factors, fetal biometry, and biomarkers at 35–37 weeks' gestation



Anca Ciobanu; Angeliki Rouvali; Argyro Syngelaki; Ranjit Akolekar; Kypros H. Nicolaides

A combination of maternal factors and fetal biometry predict 90% of small for gestational age neonates born within 2 weeks of assessment at a screen-positive-rate of 23%.

488 Circulating microparticle proteins obtained in the late first trimester predict spontaneous preterm birth at less than 35 weeks' gestation: a panel validation with specific characterization by parity



Thomas F. McElrath; David E. Cantonwine; Arun Jeyabalan; Robert C. Doss; Gail Page; James M. Roberts; Brian Brohman; Zhen Zhang; Kevin P. Rosenblatt

Protein biomarkers with associated vital processes were differentially expressed at 10–12 weeks among women who delivered spontaneously at ≤ 35 weeks when compared to term deliveries.

490 Differentiating *Streptococcus pseudoporcinus* from GBS: could this have implications in pregnancy?

Maureen Grundy; Nuntra Suwantararat; Mayer Rubin; Renee Harris; Ann Hanlon; Tsigereda Tekle; Brandon Ellis; Karen Carroll; Frank Witter
Streptococcus pseudoporcinus is a unique bacterium that can cause false-positive *Streptococcus agalactiae* (GBS) results and has associations with maternal and neonatal morbidity.

492 Are prediction models for vaginal birth after cesarean accurate?

Benjamin S. Harris; R. Phillips Heine; Jinyoung Park; Keturah R. Faurot; Maeve K. Hopkins; Andrew J. Rivara; Hanna R. Kemeny; Chad A. Grotegut; J. Eric Jelovsek

Two widely used and internally validated vaginal birth after cesarean delivery models demonstrate limited external validity in our distinct patient cohort.

494 Subsequent pregnancy outcomes after open maternal-fetal surgery for myelomeningocele



William H. Goodnight; Ozan Bahtiyar; Kelly A. Bennett; Stephen P. Emery; J. B. Lillegard; Allan Fisher; Ruth Goldstein; Jillian Jatres; Foong-Yen Lim; Laurence McCullough; Ueli Moehrlen; Julie S. Moldenhauer; Anita J. Moon-Grady; Rodrigo Ruano; Daniel W. Skupski; Elizabeth Thom; Marjorie C. Treadwell; KuoJen Tsao; Amy J. Wagner; Lindsay N. Waqar; Michael Zaretsky; for the fMMC Consortium sponsored by NAFTA Net

Pregnancies subsequent to open maternal-fetal surgery have an increased risk for complications related to the fetal surgery incision, the most significant being a risk of uterine rupture of 10% that carries significant risk of fetal morbidity. Counseling prior to fetal surgery should include the potential risk on future pregnancy outcomes.

ORIGINAL RESEARCH *(continued)***496** The telomere gestational clock: increasing short telomeres at term in the mouse

Mark Phillippe; Michala R. Sawyer; P. Kaitlyn Edelson

These studies have demonstrated a significant increase in short telomeres in fetal membranes beginning near term and in the placenta at term in pregnant mice.

498 M281, an anti-FcRn antibody, inhibits IgG transfer in a human ex vivo placental perfusion model

Sucharita Roy; Tatiana Nanovskaya; Svetlana Patrikeeva; Edward Cochran; Viraj Parge; Jamey Guess; John Schaeck; Amit Choudhury; Mahmoud Ahmed; Leona E. Ling

M281 reduces placental immunoglobulin G transfer from maternal to fetal circulation, a mechanism that may benefit alloimmune and autoimmune diseases of the fetus and newborn.

IMAGES IN GYNECOLOGY

500 Complete spontaneous abortion with expulsion of an intact six-week embryo

Giovanni Delli Carpini; Andrea Ciavattini

A 35 year old woman at 8 weeks of amenorrhea presented at the emergency department of our hospital with vaginal bleeding and pelvic pain.

501 Interstitial pregnancy mimicking an invasive hydatidiform mole

Sandhya Mittal; Sharifa Menon

A 36-year-old patient presented with abdominal pain and vaginal spotting. Examination revealed invasive hydatidiform mole and interstitial pregnancy.

RESEARCH LETTER

502 Medical specialty of buprenorphine prescribers for pregnant women with opioid use disorder

Mara A. G. Hollander; Marian P. Jarlenski; Julie M. Donohue; Evan S. Cole; David Kelley; Elizabeth E. Krans

LETTERS TO THE EDITORS

504 Medical abortion reversal: science and politics meet

Mark G. Doherty

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Antoinette T. Nguyen; Khadijah Z. Bhatti; Gretchen S. Stuart

505 The unforeseen psychological, behavioral and physiological complications associated with intra uterine device use contraceptions

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506 An instrument which addresses the expectations of pregnant women over childbirth

Gabriela M. Marques; Diego Z. Nascimento; Betine P. M. Iser

507 Twin-twin transfusion syndrome: need for mechanistic studies

Michael G. Ross; Martin van Gemert; Jeroen P. Wijngaard

508 Reply to: Twin—twin transfusion syndrome: need for mechanistic studies

Fiona L. Mackie; R. Katie Morris; Mark D. Kilby

509 A reply to “Low HIV testing rates among US women who report anal sex and other HIV sexual risk behaviors”

Paris N. Stowers

CORRECTIONS

499 September 2018 (vol. 219, no. 3, page 243)

A figure legend in an Expert Review published in September 2018 reversed the identification of 2 panels.

499 September 2018 (vol. 219, no. 3, pages 303.e1 and 303.e6)

An author's name is corrected in the citation and author information sections of an Original Research article published in September 2018.

SOCIETY FOR MATERNAL-FETAL MEDICINE

B2 Society for Maternal-Fetal Medicine (SMFM) Consult Series #48: Immediate postpartum long-acting reversible contraception for women at high risk for medical complications



Society for Maternal-Fetal Medicine (SMFM); Laura K. Vricella;

Lori M. Gawron; Judette M. Louis

This article discusses the benefits, challenges, and barriers of providing immediate postpartum long-acting reversible contraception methods for women with complex medical conditions.

RECRUITMENT & EMPLOYMENT OPPORTUNITIES

17A Classified advertising