

# ULTRASOUND

## in Obstetrics & Gynecology

Editor in Chief: Professor Basky Thilaganathan

The Official Journal of  
the International Society of Ultrasound  
in Obstetrics and Gynecology



### CONTENTS

#### OPINION

- 539 Low-dose aspirin plus low-molecular-weight heparin for the prevention of pre-eclampsia: yes, no or maybe  
*A. Sotiriadis*

#### EDITORIAL

- 542 Benefits of contingent screening vs primary screening by cell-free DNA testing: think again  
*D. Oepkes, J. L. Bartha, M. Schmid and Y. Yaron*

#### REFEREE COMMENTARIES

- 546 Placental histological patterns and uterine artery Doppler in pregnancies complicated by pre-eclampsia  
*N. J. Sebire*
- 547 Prediction of microcephaly at birth using fetal head circumference  
*R. L. Deter*

#### SYSTEMATIC REVIEW

- 548 Prevention of pre-eclampsia by low-molecular-weight heparin in addition to aspirin: a meta-analysis  
 *S. Roberge, S. Demers, K. H. Nicolaides, M. Bureau, S. Côté and E. Bujold*

#### ORIGINAL PAPERS

- 554 Contingent screening for preterm pre-eclampsia  
 *D. Wright, D. M. Gallo, S. Gil Pugliese, C. Cusanova and K. H. Nicolaides*
- 560 First- and second-trimester maternal serum markers of pre-eclampsia in twin pregnancy  
*R. Swirsky, O. Levinsohn-Tavor, N. Feldman, E. Klog, H. Guckle and R. Maymon*
- 565 Uterine artery pulsatility index at 12, 22, 32 and 36 weeks' gestation in screening for pre-eclampsia  
 *N. O'Gorman, G. Tampakoudis, A. Wright, D. Wright and K. H. Nicolaides*
- 573 Mean arterial pressure at 12, 22, 32 and 36 weeks' gestation in screening for pre-eclampsia  
 *A. Tayyar, K. Krithinakis, A. Wright, D. Wright and K. H. Nicolaides*
- 580 Placental histological patterns and uterine artery Doppler velocimetry in pregnancies complicated by early or late pre-eclampsia  
*R. Orabona, C. M. Donzelli, M. Falchetti, A. Santoro, A. Valcamonica and T. Frusca*
- 586 Prediction of microcephaly at birth using three reference ranges for fetal head circumference: can we improve prenatal diagnosis?  
 *Z. Leibovitz, E. Daniel-Spicgel, G. Malinger, K. Haratz, M. Tamarkin, L. Gindes, L. Schreiber, L. Ben-Sira, D. Lev, I. Shapiro, H. Bakry, B. Weizman, A. Zreik, S. Egenburg, A. Arad, R. Tepper, D. Kidron and T. Lerman-Sagie*
- 593 Application of a novel prenatal vertical cranial biometric measurement can improve accuracy of microcephaly diagnosis *in utero*  
 *Z. Leibovitz, C. Shiran, K. Haratz, M. Tamarkin, L. Gindes, L. Schreiber, G. Malinger, L. Ben-Sira, D. Lev, I. Shapiro, H. Bakry, B. Weizman, A. Zreik, D. Kidron, S. Egenburg, A. Arad and T. Lerman-Sagie*

- 600 Region-specific reductions in brain apparent diffusion coefficient in cytomegalovirus-infected fetuses  
*G. Yaniv, C. Hoffmann, B. Weisz, S. Lipitz, E. Katorza, D. Kidron, D. Bergman and A. Biegler*
- 608 Tissue Doppler imaging in fetuses with aortic stenosis and evolving hypoplastic left heart syndrome before and after fetal aortic valvuloplasty  
 *C. Wohlmuth, D. Wertaschnigg, I. Wieser, W. Arzt and G. Tulzer*
- 616 Prenatal diagnosis of congenital heart defects: accuracy and discrepancies in a multicenter cohort  
*C. L. van Velzen, S. A. Clur, M. E. B. Rijlaarsdam, E. Pajkrt, C. J. Bax, J. Hruda, C. J. M. de Groot, N. A. Blom and M. C. Haak*
- 623 Umbilical vein vasomotion detected *in vivo* by serial three-dimensional pixelwise spatially angle-corrected volume flow measurements  
 *T. Scholbach, C. Heien and T. M. Eggebo*
- 629 Reliability of new three-dimensional ultrasound technique for pelvic hialar area measurement  
 *A. Youssef, E. Montaguti, O. Sanlorenzo, L. Cariello, G. Salsi, G. Morganelli, C. Azzarone, G. Pilu and N. Rizzo*
- 636 Comparison of translabial three-dimensional ultrasound with magnetic resonance imaging for measurement of levator hialar biometry at rest  
 *T. F. M. Vergeldt, K. J. B. Notten, J. Stoker, J. J. Fütterer, R. G. Beets-Tan, R. F. A. Vliegen, K. J. Schweitzer, E. F. M. Mulder, S. M. J. van Kuijk, J. P. W. R. Roovers, K. B. Kluivers and M. Weeninkhoff*
- 642 Association of urinary and anal incontinence with measures of pelvic floor muscle contractility  
*S. H. Oversand, I. K. Atan, K. L. Shek and H. P. Dietz*
- 646 Disinfection of transvaginal ultrasound probes in a clinical setting: comparative performance of automated and manual reprocessing methods  
 *D. L. Buescher, M. Möllers, M. K. Falkenberg, S. Amler, F. Kipp, J. Burdach, W. Klockenbusch and R. Schmitz*

#### LETTERS TO THE EDITOR

- 652 Interobserver agreement in assessment of polycystic ovarian morphology using pattern recognition  
 *D. Van Schoubroeck, N. Raine-Fenning, A. J. F. Installé, D. De Neubourg, B. De Moor, T. Bourne, T. Van den Bosch and D. Timmerman*
- 653 Successful ultrasound-guided intraoperative external cephalic version of fetus in breech presentation immediately before *ex-utero* intrapartum treatment (EXIT) procedure  
 *T. Kanasugi, A. Kikuchi, M. Murai, Y. Sasaki, C. Isurugi, R. Oyama and T. Sugiyama*
- 655 HDlive imaging of cystic uterine leiomyoma degeneration  
 *F. Raga, C. Llinares, S. Cholvi, F. Bonilla, C. Pascual and A. Cano*

#### PICTURE OF THE MONTH

- 657 Intrauterine Zika virus infection and microcephaly: correlation of perinatal imaging and three-dimensional virtual physical models  
 *H. Werner, T. Fazecas, B. Guedes, J. Lopes Dos Santos, P. Daltro, G. Tonni, S. Campbell and F. Araujo Júnior*