

ULTRASOUND

in Obstetrics & Gynecology

Editor in Chief: Professor Basky Thilaganathan

Guest Editors: Chahinda Ghossein-Doha, Asma Khalil and Christoph Lees

CONTENTS

PERSPECTIVE

- 7 Placental syndromes: getting to the heart of the matter
B. Thilaganathan

EDITORIALS

- 10 Maternal hemodynamics: a 2017 update
C. Ghossein-Doha, A. Khalil and C. C. Lees
- 15 Ophthalmic artery Doppler analysis: a window into the cerebrovasculature of women with pre-eclampsia
S. C. Kane, S. P. Brennecke and F. da Silva Costa

REFEREE COMMENTARIES

- 22 Lung and cardiac ultrasound for hemodynamic monitoring
L. Zielekiewicz and M. Leone
- 22 Endothelial dysfunction and vascular stiffness in women with previous pre-eclampsia
E. A. Morris and I. M. Bernstein
- 23 Pre-eclampsia: a risk factor for asymptomatic heart failure
H. Boardman

ORIGINAL RESEARCH ARTICLES

Validation

- 25 Validation of maternal cardiac output assessed by transthoracic echocardiography against pulmonary artery catheterization in severely ill pregnant women: prospective comparative study and systematic review
J. Cornette, S. Laker, B. Jeffery, H. Lombaard, A. Alberts, D. Rizopoulos, J. W. Roos-Hesselink and R. C. Pattinson
- 32 Cardiac output assessment in pregnancy: comparison of two automated monitors with echocardiography
D. Vinayagam, O. Patey, B. Thilaganathan and A. Khalil
- 39 Maternal cardiovascular function at 35–37 weeks' gestation: relation to maternal characteristics
G. P. Guy, H. Z. Ling, P. Garcia, L. C. Poon and K. H. Nicolaides
- 46 Longitudinal study of vascular structure and function during normal pregnancy
C. Iacobaeus, E. Andolf, M. Thorsell, K. Bremme, G. Jörneskog, E. Östlund and T. Kahan

Uteroplacental disorders

- 54 Total uterine artery blood volume flow rate in nulliparous women is associated with birth weight and gestational age at delivery
A. McKelvey, K. Pateman, I. Balchin, D. M. Peebles, C. H. Rodeck and A. L. David
- 61 Maternal cardiac function at 35–37 weeks' gestation: prediction of pre-eclampsia and gestational hypertension
G. P. Guy, H. Z. Ling, P. Garcia, L. C. Poon and K. H. Nicolaides
- 67 Maternal cardiac function at 35–37 weeks' gestation: relationship with birth weight
G. P. Guy, H. Z. Ling, M. Machuca, L. C. Poon and K. H. Nicolaides
- 73 Screening for pre-eclampsia using sFlt-1/PIGF ratio cut-off of 38 at 30–37 weeks' gestation
I. Dragan, T. Georgiou, N. Prodan, R. Akolekar and K. H. Nicolaides
- 78 Change in maternal cardiac output from preconception to mid-pregnancy is associated with birth weight in healthy pregnancies
A. A. Mahendru, F. L. Foo, C. M. McEniry, T. R. Everett, I. B. Wilkinson and C. C. Lees

Special Issue on Maternal Hemodynamics

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



Therapy

- 85 Longitudinal hemodynamics in acute phase of treatment with labetalol in hypertensive pregnant women to predict need for vasodilatory therapy
D. Stott, M. Bolten, D. Paraschiv, I. Papastefanou, J. B. Chambers and N. A. Kametas
- 95 Serial hemodynamic monitoring to guide treatment of maternal hypertension leads to reduction in severe hypertension
D. Stott, I. Papastefanou, D. Paraschiv, K. Clark and N. A. Kametas
- 104 Lung and cardiac ultrasound for hemodynamic monitoring of patients with severe pre-eclampsia
J. Ambrozic, G. Brzan Simenc, K. Prokselj, N. Tul, M. Cvijic and M. Lucovnik

Postpartum

- 110 Preclinical atherosclerosis at the time of pre-eclamptic pregnancy and up to 10 years postpartum: systematic review and meta-analysis
N. M. Milic, J. Milin-Lazovic, T. L. Weissgerber, G. Trajkovic, W. M. White and V. D. Garovic
- 116 Endothelial dysfunction and vascular stiffness in women with previous pregnancy complicated by early or late pre-eclampsia
R. Orabona, E. Sciatti, E. Vizzardi, I. Bonadei, A. Valcamonica, M. Metra and T. Frusca
- 124 Insights into cardiac alterations after pre-eclampsia: an echocardiographic study
R. Orabona, E. Vizzardi, E. Sciatti, I. Bonadei, A. Valcamonica, M. Metra and T. Frusca
- 134 Prevalence of asymptomatic heart failure in formerly pre-eclamptic women: a cohort study
N. M. Breetveld, C. Ghossein-Doha, S. M. J. van Kuijk, A. P. van Dijk, M. J. van der Vlugt, W. M. Heidema, J. van Neer, V. van Empel, H.-P. Brunner-La Rocca, R. R. Scholten and M. E. A. Spaanderman
- 143 Pre-eclampsia: an important risk factor for asymptomatic heart failure
C. Ghossein-Doha, J. van Neer, B. Wissink, N. Breetveld, L. J. de Windt, A. P. J. van Dijk, M. J. van der Vlugt, M. C. H. Janssen, W. M. Heidema, R. R. Scholten and M. E. A. Spaanderman
- 150 Delivery of small-for-gestational-age neonate and association with early-onset impaired maternal endothelial function
S. L. Hillman, T. Kubba and D. J. Williams

LETTER TO THE EDITOR

- 155 Clinical inference of maternal renal venous Doppler ultrasonography
A. S. Staelens, S. Vonck, K. Tomsin and W. Gyselaers

CORRESPONDENCE

- 157 Re: Rational and irrational ratios
S. Verlohren and H. Stepan
- 158 Reply
H. Cuckle
- 159 Re: Consensus definition for placental fetal growth restriction: a Delphi procedure
C. A. Schreurs, B. W. J. Mol and M. A. de Boer
- 159 Reply
S. J. Gordijn, on behalf of the coauthors