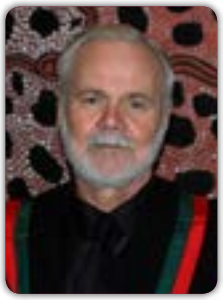
conferenceseries.com

Michael J Sinosich, Gynecol Obstet 2018, Volume 8
DOI: 10.4172/2161-0932-C4-032

5th International Conference on

Gynecology and Obstetrics

October 08-10, 2018 | Zurich, Switzerland

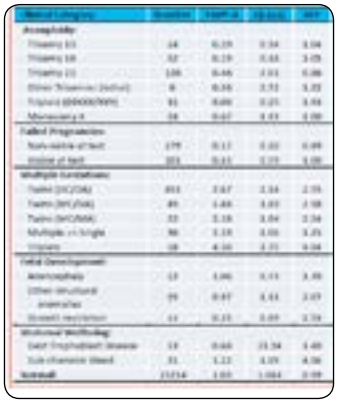


Michael J Sinosich

Douglass Hanly Moir Pathology, Australia

What does first trimester biochemistry tell us?

Prenatal screening for assessment of fetal development has been established for almost half a century. Here is a review of our first trimester screening programme. Study group included: i) aneuploid: trisomy 21 (n=128), trisomy 18 (n=52), trisomy 13 (n=14), triploid (n=31), sex chromosome aneuploidies (n=24) ii) failed pregnancies (n=380), iii) fetal structure: anencephaly (n=12), fetal growth restriction (n=11), iv) maternal health: gestational trophoblastic disease (n=13), sub-chorionic bleeding (n=21). PAPP-A, F hCG and AFP were quantified (DELFIA® DXpress; PerkinElmer) and marker MoM values calculated by LifeCycle v2.2 (Perkin Elmer), using lot specific derived polynomial regression curves. In table median MoM values are presented for three fetoplacental derived markers. A low PAPP-A was associated with poor pregnancy prognosis, including fetal mal development. FβhCG levels were increased in pregnancies carrying Trisomy 21 fetus (2.01+/-0.28), and pregnancies with coexistent trophoblastic disease (21.94+/-66.95. AFP levels were increased in pregnancies which experienced transplacental bleeding (4.06+/-2.79) or pregnancies carrying an anencephalic fetus (1.70+/-0.41). All markers were significantly increased in pregnancies carrying multiple foetuses but not in pregnancies with a demised twin. The above findings confirm: i) low PAPP-A level is the cause for concern requiring assessment of fetoplacental wellbeing, ii) elevated FβhCG level warrants examination of fetal and trophoblast development, and, iii) elevated AFP levels may be due to "leakage" of fetal blood into maternal circulation or to fetal structural maldevelopment, such as, anencephaly.



Biography

Michael J Sinosich has completed his PhD on Trophoblast Physiology and PAPP-A. His research interests include non-invasive assessment of fetomaternal wellbeing. He is the Director of Prenatal Testing (DHM Pathology) and serves as Consultant at Pictor Ltd, a developer and manufacturer of multiplexed microELISA assay platform. He has published and presented numerous papers in reputed journals and holds several patents.

msinosich@sonichealthcare.com.au