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The Possibilities Given by First Trimester Prenatal Screening Data, Uterine Arteries Pulsation Index, and Regulatory Autoantibodies in Predicting Intrauterine Growth Restriction in Females

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Abstract

© 2016, Springer Science+Business Media New York. A combined analysis of pregnancy-associated plasma protein-A (PAPP-A) values, human chorionic gonadotropin, and pulsation index of the uterine arteries was performed as part of a first trimester and serum content of eight regulatory autoantibodies screening. It was found that including autoantibodies to insulin, PAPP-A, and collagen into the analysis significantly improved the sensitivity and specificity of the prognosis and could be employed to form an intrauterine growth restriction (IUGR) risk group.

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Keywords

Autoantibodies, HCG, Intrauterine growth restriction, PAPP-A, Pulsation index

References

- [1] Goetzinger, K. R., Singla, A., Gerkowicz, S., et al. (2009). The efficiency of first-trimester serum analytes and maternal characteristics in predicting fetal growth disorders. *American Journal of Obstetrics and Gynecology*, 201(4), 412-416.
- [2] Savelyeva, G.M., Bugerenko, E.Y., Panin, O.B. (2013) Prognostic significance of violations of utero-placental circulation in the I trimester of pregnancy in patients with a history of obstetric history. *Bulletin of Medical Sciences*. - 2013. - № 7. - S. 4-8.2. -T. 10. - P. 62-67.
- [3] Dugoff, L., Lynch, A. M., Cioffi-Ragan, D., et al. (2005). First trimester uterine artery Doppler abnormalities predict subsequent intrauterine growth restriction. *American Journal of Obstetrics and Gynecology*, 193(3), 1208-1212.
- [4] Poon, L. C., Stratieva, V., Piras, S., et al. (2010). Hypertensive disorders in pregnancy: combined screening by uterine artery Doppler, blood pressure and serum PAPP-A at 11-13 weeks. *Prenatal Diagnosis*, 30(3), 216-223.
- [5] Poletaev, A., & Osipenko, L. (2009). General network of natural autoantibodies as immunological homunculus (Immunculus). *Autoimmunity Review*, 2(5), 264-271.