28<sup>th</sup> World Congress on

## Neonatology & Diagnosis

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**Introduction:** Exercise in pregnancy has been shown to benefit most women, improves or maintains physical fitness, helps with weight management, reduces the risk of gestational diabetes, and enhances patient's psychological well-being. Currently, the contraction stress test (CST) is the only existing test to assess fetal reserves. However, CST has a limited use because it requires IV placement and may put the patient in preterm labor. We propose a new test to assess fetal reserves by measuring fetal heart rate (FHR) responses to maternal exercise.

**Material & Methods:** In this case, 819 patients between 36 and 42 weeks of pregnancy were included in the study. A total of 1980 fetal assessments were performed for the following indications: Decreased fetal movements, advanced maternal age, restricted fetal growth, diabetes, post-term pregnancy, and a history of fetal distress during previous pregnancies. For maternal exercises, we used a motorized treadmill in a moderate exercise regimen (15-minute fast walk at a speed of 3 mph with an incline of 15 degrees to 25 degrees). Adverse fetal outcomes were considered if one or more of the following were present: Category III FHR tracing; 5-minute Apgar score of less than 7; admission to the neonatal intensive care nursery, unrelated to prematurity; fetal growth restriction; fetal and early neonatal demise. Statistical analysis was performed using PASW Statistics (version 18.0; IBM Corporation, New York, NY).

**Conclusion:** It appears that positive FRME has a high correlation with adverse perinatal outcome.

## **Biography**

Boris Petrikovsky completed his postgraduate training at SUNY Downstate/Maimonides Medical Center (Brooklyn, NY) and his fellowship in Maternal-Fetal Medicine at the University of Connecticut in 1988. That same year, he was a visiting researcher at Kings College School of Medicine (London, UK), specializing in Fetal Medicine and Surgery. From 1992-1999, he served as a Chief of Maternal-Fetal Medicine at North Shore University Hospital. He serves as a member of the editorial board of journals of neonatal intensive care, ultrasound diagnosis in obstetrics and pediatrics. He also serves as a reviewer for the American Journal of Obstetrics and Gynecology and the Journal of Clinical Ultrasound and Obstetrics and Gynecology. His major research interests are fetal medicine, prenatal diagnosis, fetoscopy, fetal cardiology, Ob/Gyn sonography and invasive Ob/Gyn procedures. He is board certified in Obstetrics and Gynecology and Maternal-Fetal Medicine. He is a Professor of Obstetrics and Gynecology at NYU School of Medicine.

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