ANEUPLODY SCREENING MAY BE A TOOL FOR GESTACIONAL DIABETES DIAGNOSING

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OBJECTIVE-To compare first trimester biochemical markers (maternal serum free ß-hCG and PAPP-A) in pregnant women that developed gestational diabetes (GD) with those of a control group (pregnant women without gestational diabetes), in order to assess significant differences between both groups and whether any of the biochemical markers may be a risk factor for gestational diabetes. MATERIAL AND METHODS-Retrospective study from data routinely recorded at the time of three clinical tests performed as per protocol -triple screening of first trimester, glucose screening test and glucose tolerance test-during one year. PATIENTS 2750 pregnant, 190 (6.9%) were diagnosed with GD at week 26-28. Women were also classified by gestational age, weight and age ranges at time of triple screening to assess differences based on such parameters. A hypothesis test was performed to determine any significant difference between both groups' sampling distribution. Additionally, a simple bivariate analysis was performed and Odds Ratios (OR) were estimated in order to study the force association between PAPP-A and GD, specifically across ranges of gestational age, weight and age ranges at time of triple screening. RESULTS- A significant difference was found between the sampling distribution of PAPP-A in pregnant women affected by GD and that from normal pregnant women (p=0,016). Low PAPP-A levels correlated with a higher probability of GD. Median PAPP-A decreased in gestational diabetics as weight increased. Low PAPP-A levels (at 5th, 10th, 20th and 50th percentile) significantly correlated with a higher probability of GD when only women over 70 kg were consider, and such correlation was statistically stronger as compared to the whole sample. CONCLUSIONS-Low levels of maternal serum PAPP-A in the first trimester correlates positively with a higher risk of GD in the second trimester pregnancy.