

RESISTIN, INTERLEUKIN 6 AND VITAMIN D AS PROGNOSTIC FACTORS FOR GESTATIONAL DIABETES MELLITUS

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INTRODUCTION

Gestational diabetes mellitus (GDM) may seriously increase the perinatal risk. In GDM pregnancies inflammatory parameters and biomarkers could provide informations for both pathophysiology and prediction of perinatal risk.

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AIM OF THE STUDY

is to determine whether resistin, IL-6 and vitamin d are prognostic factors for development of GDM.

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MATERIAL AND METHODS

Prospective study was conducted at the University clinic for gynecology and obstetrics, Skopje for the period of one year. 100 pregnant women in the second trimester were evaluated: 50 women with GDM and control group of 50 normoglycemic women at the same gestational age, parity and maternal age. Resistin (ELISA), interleukin 6 (Immulite) and vitamin D (Advia Centaur) are performed from periphery blood specimens.

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RESULTS

Using multivariant logistic regression analysis BMI ($p=0.017$), resistin ($p=0.034$) and vitamin D ($p=0.007$) were determined as predictive factors significantly associated with GDM. With increasing the BMI for one unit possibility for diagnosing GDM increases for about 1.1 times – OR= 1.149 95% CI (1.025-1.288). With increasing the serum level of resistin for one unit the probability for diagnosing GDM increases for more than 2 times – OR= 2.364 95% CI (1.068-5.23). With increasing the serum level of vitamin D for one unit chance for diagnosing GDM decreases for 0.889 times- OR= 0.889 95% CI (0.816-0.968).

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CONCLUSION

Our results confirmed that BMI, resistin and vitamin D were associated with GDM. They may be useful in creating possible predictive models for earlier preventive strategies for GDM.

KEYWORDS:

resistin, interleukin 6, vitamin D, gestational diabetes mellitus.