# LEVEL OF LEPTIN IN PREGNANT WOMEN WITH RISK FOR DIABETES

**M. Genova 1, K. Todorova 2, K. Tzatchev1**

UMBAL "Alexandrovska"
Chair of Clinical laboratory and Clinical immunology - 1
SHATOG "Maichin dom", Endocrinologist in High Risk Pregnancy Department –2
Medical faculty, Medical University – Sofia, Bulgaria

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**Background and Aim**

Leptin is a hormone originally assumed to be produced only by adipose cells. During pregnancy, maternal serum leptin concentrations are higher than those in non-pregnant women. Numerous studies have demonstrated that maternal peripheral leptin levels are enhanced during pregnancy, suggest that leptin concentrations peak is in the second trimester and remain elevated until delivery. Our aim was to estimate if women with GDM from the Bulgarian population have any kind of disturbances in the concentration of the leptin

**Methods**

34 pregnant women went through medical examination and observation, gestational weeks(24 vs 25 ± 4), at the age of 31.64 (± 4.49) г, divided into 4 groups: I–st. group healthy (BMI- 24.6 (± 3.98) , II –nd group pregnant with pathological values of the glucose and high levels of insulin (BMI –28.57 ± 6.17), III-rd group pregnant women with GDM (BMI –30.46 ± 6.67), and IV-th group - 6 weeks post partum (BMI –27.9 ± 5.94. Venous blood was taken to determine the levels of leptin from 0 и 60 min in the course of doing OGTT with 75 gr. glucose( ADA-criteria), the analysis was done by ELISA –" DRG" and reader " Zenith 3100.

**Results:**

The following levels of leptin for the four groups at 0 and 60 min are as follows:

Leptin: ( ng/ml)

0 min – Mean Rank: I – st group-8.64, II –nd group-19.36, III- rd group-21, IV-th group - 19.19.

60 min- Mean Rank I – st group-15.86, II –nd group-21.14, III- rd group-14.88, IV-th group – 16.56.

**Conclusions:** No statistically important difference was found between the average values oh the leptin at 0 and 60 min in the given four groups. These final results confirm the controversial data for the leptin levels for pregnant women with GDM.