

Evaluation of Metabolic Parameters of Gestational Diabetics in Postpartum Period

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Background

Gestational diabetes mellitus (GDM) have high risk for type 2 diabetes mellitus and metabolic dysfunction after pregnancy (1,2). Therefore, we aimed to evaluate the metabolic parameters in participants with history of GDM.

Methods

It was enrolled 40 patients, who had high glucose level during fasting or/and after meal and abnormal glucose level during OGTT in 24-28 weeks, in endocrinology outpatient clinic between 2011-2014. We evaluated the metabolic parameters in the sixth month of postpartum period. Weight, height, BMI were evaluated. Blood tests were performed (fasting and after meal glucose level, insulin, lipid profile, hbA1c, urea, creatinine, spot urea protein /creatinine).

Results

Postpartum diabetes mellitus was developed in 7 patients during follow up period (%17,5). The median age of the women were similar between groups (table1). Mean fasting glucose level and hbA1c values were statistically higher in women with postpartum diabetes mellitus (p:0,001 , p:0,005, respectively). The mean BMI, waist circumference, triglyceride levels were similar between groups (p:0,521, p:0,607, p:0,240; respectively).

| | Postnatal Diabet | Postnatal Nondiabet | p |
|-----------------------|------------------|---------------------|--------|
| Age | 33.14 ± 6.4 | 34.48 ± 5.7 | 0.582 |
| BMI | 31.47±8.91 | 29.13±4.4 | 0.521 |
| Waist Circumference | 99±16.381 | 96.45±13.449 | 0.607 |
| HbA1c | 6.243±1.41 | 5.297±0.55 | 0.005 |
| Fasting Glucose Level | 141.61±55.45 | 94.93±13.376 | <0.001 |

Table: Evaluation of Metabolic Parameters in Postpartum Period

Conclusion

There was not a precise finding to foresee permanent diabetes mellitus after pregnancy in GDM patients according to our study. Moreover, GDM enhances risk of postpartum ongoing diabetes mellitus.

References

1. American Diabetes Association: Gestational Diabetes Mellitus; Diabetes Care, Vol 26, suppl 1, 103-105, 2003
2. Janice Falls, Lorraine Milio. Endocrine Disease in Pregnancy. In: Brandon J.B, Amy E. H eds. The Johns Hopkins Manual of Gynecology and Obstetrics. 2th ed. Philadelphia: Lippincott Williams and Wilkins: 162-182, 2002

