Evaluation of Metabolic Parameters of Gestational Diabetics in Postpartum Period

Fatih Türker¹, Süleyman Averb¹, Esra Ataoğlu¹, Betül Çavuşoğlu Türker¹, Evrim Çakır², Mustafa Yenigün¹
¹Haskei Training and Research Hospital, Internal Medicine Clinic, Istanbul
²Haskei Training and Research Hospital, Endocrinology and Metabolic Diseases Department, Istanbul

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.

<table>
<thead>
<tr>
<th></th>
<th>Postnatal Diabet</th>
<th>Postnatal Nondiabet</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>33.14 ± 6.4</td>
<td>34.48 ± 5.7</td>
<td>0.582</td>
</tr>
<tr>
<td>BMI</td>
<td>31.47±8.91</td>
<td>29.13±4.4</td>
<td>0.521</td>
</tr>
<tr>
<td>Waist Circumference</td>
<td>99±16.381</td>
<td>96.45±13.449</td>
<td>0.607</td>
</tr>
<tr>
<td>HbA1c</td>
<td>6.24±1.41</td>
<td>5.297±0.55</td>
<td>0.005</td>
</tr>
<tr>
<td>Fasting Glucose Level</td>
<td>141.61±55.45</td>
<td>94.93±13.376</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

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.

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).

References

1. American Diabetes Association: Gestational Diabetes Mellitus; Diabetes Care, Vol 26, suppl 1, 103-105, 2003