Fetal Abdominal Overgrowth is Already Present at 20-24 Weeks’ Gestation Earlier Than The Time of Gestational Diabetes Mellitus Diagnosis

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BACKGROUND & AIMS

We previously reported that fetal abdominal overgrowth was detected at the time of GDM diagnosis at 24-28 weeks’ gestation especially in old and/or obese women, and it was persistent until delivery despite appropriate GDM management. In this study, we investigated whether fetal abdominal overgrowth is already present at 20-24 weeks’ gestation more than 4 weeks earlier than the time of GDM screening and diagnosis.

RESULTS

Clinical Characteristics of Subjects

Fetal Abdominal Overgrowth in Old and/or Obese GDM Patients at Diagnosis of GDM

<table>
<thead>
<tr>
<th>Group</th>
<th>Clarity (%)</th>
<th>n</th>
<th>GA (week)</th>
<th>FL (week)</th>
<th>AC (week)</th>
<th>AC/GA</th>
<th>BPD (week)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGT</td>
<td>35.6 ± 1.3</td>
<td>32</td>
<td>36.0 ± 0.8</td>
<td>36.0 ± 0.8</td>
<td>36.0 ± 0.8</td>
<td>36.0 ± 0.8</td>
<td>36.0 ± 0.8</td>
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<tr>
<td>GDM</td>
<td>35.9 ± 5.6</td>
<td>32</td>
<td>34.2 ± 0.7</td>
<td>34.2 ± 0.7</td>
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CONCLUSION

Fetus of GDM mothers already showed fetal abdominal overgrowth at 20-24 weeks’ gestation more than 4 weeks earlier than diagnosis of GDM in the old and/or obese women. These findings suggest that early diagnosis and active interventions of GDM before or early pregnancy might be necessary to prevent metabolic derangements especially in the elderly and/or obese women.