Sleep Quality and Obstructive Sleep Apnea in Pregnant Women

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DEAR EDITOR,

One of the common disorders during pregnancy is sleep-disordered breathing (SDB).[1] SDB includes snoring, upper airway resistance syndrome, and obstructive sleep apnea (OSA)-hypopnea syndrome.[1]

Snoring is considered as a risk factor for adverse pregnancy outcomes, including fetal heart rate abnormalities, fetal demise, fetal growth restriction, gestational diabetes, and preeclampsia.[2,3]

Eighty-two pregnant women with gestational age more than 28 weeks were enrolled.

All cases were asked to fill valid and reliable Persian versions of Pittsburg Sleep Questionnaire (PSQI) and Berlin questionnaire (BQ).[4–5]

Mean age and mean gestational age 28 ± 4.6 years and 33.5 ± 2.7 weeks.

According to BQ, 36 (43.9%) were classified as high risk for OSA and 46 (56.1%) classified as low risk [Table 1].

Mean PSQI score was 8 ± 2.9 in all cases and it was significantly different between high- and low-risk group (mean PSQI in high-risk group was 9.3 ± 2.4 and in low-risk group was 7.1 ± 2.9, P = 0.001) [Table 2].

Frederick et al. evaluated 1303 pregnant women and found that habitual snoring was present in 7%.[3]

Facco et al. found that 34% of enrolled pregnant women are at high risk for OSA and age, body mass index (BMI), and chronic hypertension were significant predictors of OSA.[6]

Increase BMI and obesity are considered to be a risk factor for sleep disorders during pregnancy as the mass of the upper airway of the neck increases.[7]

These evidences may suggest that OSA is a problem during pregnancy which is associated with some maternal factors such as GDM and preeclampsia and it is associated with some neonatal adverse effects.


Table 1: High-risk cases in women with and without diabetes and preeclampsia

<table>
<thead>
<tr>
<th></th>
<th>High risk</th>
<th>Low risk</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>28.3±4.4</td>
<td>27.7±4.8</td>
<td>0.6</td>
</tr>
<tr>
<td>BMI (kg/m²)</td>
<td>32.3±2</td>
<td>29.3±3.3</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Diabetes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>23</td>
<td>13</td>
<td>0.001</td>
</tr>
<tr>
<td>No</td>
<td>13</td>
<td>33</td>
<td></td>
</tr>
<tr>
<td>Preeclampsia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>15</td>
<td>9</td>
<td>0.02</td>
</tr>
<tr>
<td>No</td>
<td>21</td>
<td>37</td>
<td></td>
</tr>
</tbody>
</table>

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REFERENCES