Introduction

Nausea and vomiting of pregnancy (NVP) is a common problem for patients during first trimester. This problem affects approximately 80% of pregnant women to some degree. The severe form of NVP is called hyperemesis gravidarum (HG). Although, most cases are not severe and curable with conservative methods, less than 1% women experience severe nausea and vomiting during their pregnancy. This severe form of NVP usually associated with weight loss, dehydration, electrolyte imbalance and acid-base imbalance. Hyperemesis gravidarum typically occurs during first trimester, especially, between 4th and 10th week. Many etiologic factors were suggested for cause of HG. However, the most accepted etiologic factor of HG is endocrine changes of pregnancy. Some gastrointestinal tract (GIT) pathologies have been proposed as cause of HG.

Material and Method

Our study includes 77 patients. Two groups of patient were evaluated. Group I included 37 patients who were suffering from nausea and vomiting. Group II included 40 patients who had no symptoms and applied for routine follow up. Direct stool antigen testing with using ELISA (Enzyme Linked Immunosorbent Assay) was performed.

RESULT: Helicobacter pylori stool antigen was detected in 11 (27.5%) patients in control group. in HG group Helicobacter pylori stool antigen was detected in 8 (21.6%) patients. there were no statistically significant difference.

CONCLUSION: Our study was unable to confirm association between HG and H. pylori. For elimination of genetic factors different population is should be evaluated.

Keywords: Hyperemesis gravidarum, Helicabacter pylori, Stool antigen positivity

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for comparison of group serologic status. P values less than 0.05 was considered as significant

Result

Demographic features of the groups are shown in table 1. Age, body mass index and parity were compared and there were no significant difference between two groups. There were no differences between two group’s demographic features. Helicobacter pylori stool antigen was detected in 11(27.5%) patients in control group. The prevalence of HpSA H. G group was less than control group and it was detected in 8 (21.6%) patients (Table 2). There was no statistically difference between two groups.

Table 1: Demographic features of groups

<table>
<thead>
<tr>
<th>Variables ± SD</th>
<th>H. G.</th>
<th>Control</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>27.2±7.91</td>
<td>24.9±6.46</td>
<td>.173</td>
</tr>
<tr>
<td>BMI</td>
<td>23.8±4.49</td>
<td>24.3±4.52</td>
<td>.627</td>
</tr>
<tr>
<td>Parity</td>
<td>4.2±2.38</td>
<td>3.4±2.48</td>
<td>.117</td>
</tr>
<tr>
<td>Gestational age</td>
<td>10.45±2.93</td>
<td>10.29±2.65</td>
<td>.869</td>
</tr>
</tbody>
</table>

Table 2: Helicobacter pylori status of each groups

<table>
<thead>
<tr>
<th>Helicobacter status</th>
<th>H.G. (n= 37)</th>
<th>Control (n=40)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8</td>
<td>11</td>
<td>.55</td>
</tr>
</tbody>
</table>

Discussion

Helicobacter pylori is major etiologic factor in the development of peptic ulcer and chronic active gastritis. Some studies suggest that H. pylori not only increases gastrointestinal disorders but also cardio vascular diseases. Recently, studies and meta-analysis of case control studies were shown relation between HG and H. pylori. These studies were based on the idea of hormonal changes in pregnancy. These hormonal changes have influences on gastric pH, gastric motility and immune response to H. pylori. According to physiologic chances, it could be reason for activation of inflammation.

The prevalence of H. pylori infection is 50-60% in all over the world. Stool antigen testing shows active colonization. In our study stool antigen was positive in 19 (24.7%) patients of 77 patients. This rate is similar with previous studies. Many studies were suggested the relation and many others were unable to confirm the relation. Recently published meta-analytic studies were suggested the relation. In these studies authors were suffering from heterogeneity of groups. In our study we were unable to confirm a relation. Helicobacter pylori stool antigen was detected 27.5% of control group and 21.6% in HG group. These findings mean H. pylori is more common in control group. However, the difference was not statistically significant (p=0.55). A possible explanation for these different findings could be the familial and genotypic aggregation. A study from Norway was shown that the influences of maternal genotype on HG. They concluded that risk of HG was common in women whose mother had experienced HG and they also suggested that maternal genes are more important than fetal genes. Another study was shown the familial aggregation of HG. Familial predisposing factors and different environment factors could influence severity of nausea and vomiting. This could be a reason for different results.

Conclusion

Our study was unable to confirm an association between HG and H. pylori. However, our study showed only a small social group’s results and it was also limited to a small number of cases. Results from different populations should be evaluated for elimination of genetic differences.

Hiperemezis Gravidarum Olgularında Helikobacter Pylori Antijen Pozitifiği


GERÇEK VE YÖNTEM: HG tanısı alan 37 olgu ile 40 asemptomatik obez olgu karşılaştırıldı. Gaitada Helicobacter Pylori Antijeni ELISA (Enzyme Linked Immunosorbent Assay) ile değerlendirildi.

BULGULAR: Helicobacter pylori stool antijeni sırası ile kontrol grubunda 11 (%27.5) olduğu HG grubunda ise 8 (%21.6) olgu olarak belirlendi. Istatistiksel olarak her iki grup arasında farklı bulunmadı.


Anahtar Kelimeler: Hyperemesis gravidarum, Helicobacter pylori
References


