Randomized Clinical Trials (RCTs) Study of the Efficacy of Ginger for Nausea and Vomiting among Users of Combined Oral Contraceptive Pills

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Abstract: Nausea is one of the side effects of oral contraceptive pills, and ginger has advocated as beneficial for nausea and vomiting. We aimed the effect of ginger on the nausea and vomiting resulting from the use of combined contraceptive pills in Ahvaz city, 2010. Methods: It was a randomized clinical trial study. The subjects were 140 women aged 18–44 years who had used contraceptive pills since at least four months ago. They were divided randomly into two groups (control and treatment). Data were analyzed by SPSS software. Results: The finding has shown the mean nausea (in days) in different months based on the use of ginger, and indicates that the mean symptoms in the treatment group decreased significantly as compared with the control group. Conclusion: we recommend high efficacy of Ginger to prevent nausea and vomiting in women during the use of combined oral contraceptive pills.

Key words: Ginger, nausea and vomiting, contraceptive pill.

1. Introduction

With concern the significance of population control and decreasing unwanted pregnancy, more studies are needed to decrease the complications resulting from the contraceptive methods. Combined hormonal pills, which have some side effects, are used annually by 70 million women in the world. One of these side effects is nausea that is observed in some of the users [1–4].

So far ginger has been used for medicinal purposes and it has been considered as an important plant for the traditional Chinese and Indian pharmacopoeia. One of the efficacies of ginger has always been the treatment of nausea and vomiting [5]. Ginger is the herbal root which is effective in reducing nausea by neutralizing free radicals causing inflammation [6]. The aromatic, spasmylytic carminative and absorbent properties of ginger suggest that to have an effect on the gastrointestinal tract [7]. In a study from Brazil has shown that the side effects of the plant Catuama, which was obtained from the root of ginger, was low, and it did not produce any hematological and biochemical complications and other side effects [8].

The study on volunteers’ people suggests that ginger reduces experimentally induced nausea [9]. Littleton et al. believed that ginger is effective in treating motion induced nausea and especially morning nausea and it has been used in India as an antiemetic drug from many years ago [10].

In Chinese traditional medicine, 9 grams of fresh ginger root is administered in pregnancy. Also, in Indian traditional medicine ginger has used to treat children’s health problems, digestive system complications, improving appetite and arthritis pain. In China and Japan, ginger is used to treat headache, cold, nauseas, vomiting and severe stomach complications, and it has been recently administered for the treatment of severe nausea in the first months of pregnancy [6].

A study has shown that ginger has antiemetic effects and can be used in food and drinks in the form of...
crystallized powder [11]. Regarding the significance of women’s health and rights for pregnancy, which has been also proved by WHO. So we aimed this study was identifying the effect of ginger on the nausea resulting from the use of combined contraceptive pills in Ahvaz City, 2010.

2. Materials & Methods

A randomized clinical trial study was conducted involving 140 women in two groups (treatment & control) who were referred to health centers for family planning consultation. They were aged 18–44 years which had used contraceptive pills since at least four months ago, They did not use alcohol, cigarette and specific drugs, had no nutritional habits and had nausea and vomiting followed by the use of contraceptive pills. 140 women were included in the study and were divided randomly in to two groups (treatment & control). Then, they were divided again into two cycles before and two cycles after the treatment. We collected data regarding demographic information, menstrual history and the duration of nausea for all 140 subjects. After completing their informed consent, they were given an interview. Data was collected by three health professionals. This study has been performed in treatment group, by using 1 gr of ginger powder which has been added to 200 cc boiling water. After boiling for some minutes, it was poured in a glass and administered for the subjects with a little honey or any other sweet matter; the subjects had to drink one hour before using contraceptive pills.

2.1 Ethics

The study protocol was approved by ethics committee of Ahvaz Jundishapur University of Medical Sciences. All patients provided written informed consent.

2.2 Statistical Analysis

Mean days duration of nausea in Treatment & control groups was determined using descriptive statistics, and Chi Square test was then performed to identify possible association between uses of ginger and reduce mean days duration of nausea in Treatment & control groups. All the analysis was performed using SPSS [17] statistical analysis software.

3. Results

The findings of the study on 140 subjects were nearly cohort regarding age, height and weight.

The mean age of the patients was 23.55±21.5 years, and 72.5% was in the age group of 24–31 years. The mean weight of the patients was 63.87±8.86 kg, mostly (37%) were in the weight group of 59-69 kg, and 5% was in the weight group of 75–85 kg.

The mean height of the participants was 158.93±5.67 cm.

The majority of samples (51%) were in the group 158–168 cm. At least 4.5% was in the group 140–150 cm and 170–178 cm. Most of them (44.5%) had primary education or with guidance school degree, 3.5% had diploma or higher and the remnant were low literate.

The majority of the samples (80.2%) had the menstrual cycle of 26–31 days.

The mean menstrual cycle was 27.28±2.62 days, and the median was 28 days. The rate of bleeding in 61% of them was normal and in 12.5% was high.

The mean duration of bleeding was 4.43±1.67 days.

The duration of menstrual bleeding in the majority of samples (73.5%) were 5–7 days and in the minority of samples (4.1%) was 8–11 days.

The number of live births in 42% was one, in 22% two children, in 3.6% was childless, and in the remnant the number of children reached to 5.

The study indicates that the mean symptoms in the treatment group decreased significantly compared with the control group (Table 1).

4. Discussion

There are few studies about the efficacy of Ginger for Nausea and vomiting in women that used combined
Table 1  Mean days duration of nausea in treatment group as compare Control group.

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<th>Mean duration of nausea (Days)</th>
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<tr>
<td>Control group</td>
<td>22 3.7 First month after the use</td>
</tr>
<tr>
<td>Treatment group</td>
<td>21 1.03 Second month after the use</td>
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During the use of combined oral contraceptive pills (OCPs) as shown in other studies. Therefore, it caused use of this method continuously, and consequently leads to decrease unwanted pregnancy and undesirable outcomes of it. Moreover, this method of treatment is effective, safe and accessible.

References

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