

LITERATUR REVIEW: ACUPRESSURE PERICARDIUM (P6) THERAPY TO REDUCE THE FREQUENCY OF NAUSEA AND VOMITING IN PREGNANT WOMAN

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ABSTRACT

Nausea and vomiting are physiological. This physiological condition will turn into pathology if good treatment is not carried out. One non-pharmacological treatment to reduce nausea and vomiting can be acupressure. Nausea, vomiting is often considered a normal thing that occurs in pregnant women, so it is often ignored. Symptoms of nausea can be severe if not managed properly. Various efforts have been made to reduce maternal nausea and vomiting. In addition to pharmacological therapy can also be carried out nonpharmacological therapy that is simple, inexpensive, effective, and without adverse side effects, namely in the form of acupressure or massage at the point 6 of the pericardium. The purpose of the study was to measure literature related to pericardium acupressure. The method used in this study is metadata analysis using a literature review by searching for relevant articles. The review source uses electronic media from several databases including Science Direct and Google Scholar which were published from 2015 to 2020. With the keywords, vomiting/vomiting; nausea/nausea; pregnancy/pregnant women; acupressure/acupressure; pericardium 6/ neiguan. Results: Based on the results of a literature review of several studies, it shows that there is an effect of providing acupressure techniques on reducing nausea and vomiting in pregnant women in the first trimester. Discussion: Acupressure at pericardium point 6 can produce good evaluations in mothers who experience nausea and vomiting in the mild and moderate categories. Acupressure therapy also does not require taking drugs because with acupressure therapy the body already contains drugs. Conclusion: The use of the pericardium 6 acupressure method in pregnant women in reducing nausea and vomiting shows its effectiveness.

Keywords: acupressure; nausea pregnant woman; pericardium 6

INTRODUCTION

Pregnancy defined as a union between an egg and a sperm, which marks the beginning of a separate event, but there was a series of events that surrounds it (Bobak, 2005). Various changes occur in mothers getting pregnant in the first trimester is wrong the only thing is morning sickness, nausea and vomiting (Kurnia, 2009). Nauseous (nausea) and vomiting (morning sickness) is a normal symptom and is often found on first trimester of pregnancy. Nausea usually happens in the morning, but can also occurs at any time and night day. These symptoms occur more or less after 6 weeks after day first and last menstruation lasted for approximately 10 weeks (Prawirohardjo, 2009). Pregnancy is from conception to the birth of the fetus, the normal length of pregnancy is 280 days or 40 weeks or 10 months or 9 months. Pregnancy is divided into 3 trimesters, in the first trimester it lasts up to 14 weeks, in the second trimester it lasts up to 15 weeks – 28 weeks and in the third trimester it lasts up to 29 weeks – 40 weeks (Nugroho Taufan, 2014). Despite nausea and vomiting will disappear by itself when pregnancy enters second trimester, but nausea and Vomiting is something to be wary of (Triyana, 2013). Nausea and vomiting in pregnancy is the body's response caused by hormonal changes during pregnancy. Nausea and vomiting usually occur from 5 weeks of gestation, which is calculated based on the first day of the last menstrual period (LMP), and reaches a peak at 8-12 weeks of gestation and ends at 16 weeks of gestation. -18 weeks (Ratih, Nur Rakhmawati, 2013).

Nausea and vomiting that are not resolved in pregnant women will experience complications. The most obvious complications are dehydration and malnutrition. If not handled properly, this can cause loss of gastric fluid causing dehydration, metabolic alkalosis and hypokalemia. Patients need to receive fluid replacement therapy to correct dehydration. If vomiting continues for some time, maternal weight loss, oliguria, hypokalemic alkalosis and constipation will occur. Intrauterine fetal growth restriction has also been reported. Sometimes, violent vomiting can also cause rupture of the esophagus due to pressure, liver damage, jaundice and even death (Hanretty, 2014). According to Sinclair (2010), medical intervention for nausea and vomiting in pregnancy there is nothing approved by the FDA (Food and Drug administration). Some treatments the recommended one is one of them Chinese medicine point P6 next written point P6. Available references referred to, among others "Acupuncture in Clinical Practice" stated that the stimulus is at the point P6 is an important point given acupressure to the client with hyperemesis (Nadia Ellis in Artika, 2006). This too supported by Koosnadi Saputra (2000) who wrote that point P6 is one of the points used in emergency cases with nausea and vomiting. This treatment reduces nausea in many woman.

Acupressure can provide stimulation to acupressure points with pressing techniques. Pressure is carried out as a substitute for needling which is done in acupressure with the aim of facilitating the flow of vital energy throughout the body (Widyastuti et al., 2019). Acupressure can stimulate the regulatory system and activate endocrine and neurological mechanisms, which are physiological mechanisms for mild and moderate vomiting. Acupressure therapy is carried out by manually pressing on the pericardium point 6 in the wrist area, namely 3 fingers from the wrist (Mariza & Ayuningtias, 2019). Research results show that acupressure at the Nei Guan point (pericardium 6) is effective in reducing nausea and vomiting in pregnant women in the first trimester. Acupressure at the Nei Guan point (pericardium 6) can stimulate the release of the hormone cortisol which can increase the body's metabolism so that nausea and vomiting can be felt. Another research was conducted by (Mariza & Ayuningtias, 2019) at PMB Wirahayu Panjang in 2018 with the title "Application of Acupressure at Point P6 Against Emesis Gravidarum in Pregnant Women in the 1st Trimester". This research was carried out on the 3 fingers below the wrist in a circular manner, carried out for 7 minutes every morning. This technique is carried out for 4 days independently by the patient. Evaluation was carried out on day 4 in the morning using the Rhode index questionnaire. This research can be concluded that there is an effect of giving pericardium point 6 (p6) acupressure on reducing emesis gravidarum or nausea and vomiting.

METHOD

The method used in this study was data collection analysis using a literature review by looking for articles relevant to the topic of pericardium 6 acupressure to reduce nausea and vomiting in pregnant women. The review source uses electronic media from several databases, including Science Direct and Google Scholar, which were published between 2015 and 2020. The keywords used by the author are vomiting; nausea/ nausea; pregnancy/pregnant women; acupressure/acupressure; Pericardium 6/ Neiguan. The results of the search using the Science Direct database obtained 496 articles, while Google Scholar obtained 245 articles. The full text articles and abstracts obtained were reviewed to select articles that met the inclusion criteria; Pregnant women who experience nausea and vomiting during pregnancy, acupressure point P6, nausea and vomiting are reduced/disappeared. The articles reviewed consisted of 3 international journals and 6 national journals which were divided into: a) 4 articles using a treatment group and

a control group of respondents. The division of the 4 articles; 2 of the 4 articles used a control group and placebo for respondents. b) 5 articles did not use a control group. Articles were obtained, reviewed, arranged systematically, compared with each other and discussed with other related literature.

RESULTS AND DISCUSSION

A journal search was carried out on the database using the keywords nausea, vomiting, pregnant women, acupressure, pericardium 6. Articles found that met the criteria were 5 journals consisting of 2 international journals and 3 national journals. According to research in Iran conducted by (Saber et al., 2013) entitled "Acupressure and ginger to relieve nausea and vomiting in pregnancy: a randomized study", with a total of 59 pregnant women as respondents. This study has inclusion criteria including being willing to participate in the research, having complaints of nausea and vomiting from mild to moderate, gestational age less than 16 weeks, with a singleton pregnancy, the respondent can read and write, has no history of other diseases such as digestive disorders, is not pregnant. using other methods for the treatment of NVP (Nausea Vomiting Pregnancy) in the last 3 weeks, and can eat ginger capsules or can use a bracelet as specified in the correct placement. Divided into 2 groups, namely the treatment group and the control group. The treatment group consisted of 53 pregnant women who were given elastic Sea Band bracelets with buttons that pressed at the P6 point to wear continuously except when the mothers showered. The intervention was given for 7 days, the first 3 days were without intervention, the next 4 days using a sea band acupressure bracelet. The control group consisted of 53 pregnant women who were not given intervention, and 53 pregnant women in the placebo group were given 12 capsules of 250 mg ginger called Zintoma for 4 days (days 4-7) and 3 capsules every day. This research shows that ginger is more effective than acupressure for alleviating symptoms of mild to moderate nausea and vomiting in pregnant women.

The second article is research carried out at the Department of Obstetrics and Gynecology, Faculty of Medicine, University Malaya Medical Center, Kuala Lumpur, and Department of Obstetrics and Gynecology, Hospital Raja Permaisuri Bainun, Ipoh, Malaysia. The number of samples in this study was 120 pregnant women. The inclusion criteria in this study were a singleton pregnancy between 5 and 14 weeks of gestation that appeared spontaneously with moderate to severe HG requiring hospitalization. The treatment group consisted of 60 pregnant women. The intervention given to the treatment group was to give bracelets to patients in the treatment group wearing a band with small beads underneath which applied pressure to the neiguan point. The placebo group wore identical bracelets without acupressure beads, applied to the same areas for the same duration of time per day, for three days. Both groups wore the bracelet for 12 hours per day, from admission until the third day and both groups were given intravenous metoclopramide and thiamine supplements routinely during hospitalization. The results of the research in the first article show that acupressure therapy at the neiguan point is no more effective than athymetic treatment, the use of acupressure at the neiguan point can be used as additional therapy for treating nausea and vomiting in pregnant women (Adlan et al, 2017).

The third article takes research at the Sananwetan Blitar Community Health Center. The number of respondents in this study was 15 pregnant women with first trimester pregnant women who experienced moderate nausea and vomiting. The intervention provided was that in this design there

was no comparison group (control) but a first observation (pretest) was carried out which allowed researchers to determine the reduction in nausea and vomiting after being given acupressure at the Nei Guan point, for 9 days. The fourth study shows that the results of this research are that there is an effect of giving acupressure to Nei Guan (P6) on reducing vomiting and nausea in first trimester pregnant women at the Sananwetan Community Health Center, Blitar City (Renityas, 2019).

The fourth article is research conducted in the working area of the Gambirsari Community Health Center, Surakarta. This study used a population of all 1st trimester pregnant women who experienced emesis gravidarum at the Gambirsari Community Health Center, with a sample size of 10 pregnant women. The intervention given in this study was by pressing the P6 point or neiguan which is believed to be the main point for eliminating nausea and vomiting. This point is located on the volar aspect of the forearm, which is about 3 cm above the crease of the wrist and between two tendons. The type of research used is quasi-experimental with one group pre test and post test design, using an instrument in the form of the RINVR questionnaire where Rodhes INVR (Index of Nausea Vomiting and Retching). From the research results, it was found that complementary acupressure therapy was effective in treating emesis gravidarum in pregnant women in the first trimester at the Gambirsari Community Health Center, Surakarta with Asymp.sig results. (2-tailed) obtained a value of $0.005 < 0.05$, this means that there is a significant difference between the post test results and the pre test results. This means that acupressure can reduce the mother's total RINVR score quite significantly (Widyastuti et al. 2019).

The fifth article takes up research in Iran. The number of respondents in this study was 90 pregnant women. The inclusion criteria are: (1) first pregnancy, (2) pregnancy under 12 weeks, and (3) singleton pregnancy. Patients were allocated into one of three groups (1) pressure on PC6 4 times a day, for 10 minutes, (2) sham acupressure, and (3) vitamin B6 plus metoclopramide treatment, using a random block method, with a sample size of 30 people for each group. The patients in both the acupressure and sham acupressure groups were unaware of their group. In all 3 groups, the first day was dedicated to the control phase, and the intervention started on the second day, which continued until the end of the fifth day. In the acupressure group, this pressure was applied to the Neiguan acupoint (PC6) 4 times a day (in the morning after waking up, in the afternoon, in the evening, and at night before going to bed for 10 minutes with the patient's maximum endurance (with constant pressure and not with massage). If patients experienced severe nausea during the pressure interval, they could only undergo one trial earlier than the prescribed four times during the day. In the sham acupressure group, pressure was applied to the Waiguan (TE5), the counterpart of the Neiguan, located on the aspect back of the forearm. During the study period, all patients received the same training regarding diet (using low-fat foods, solid foods, frequent meals, low volume per meal, etc.). The fifth study showed that PC6 acupoint pressure could reduce the severity of nausea and vomiting, and vomiting (Tara et al, 2020).

Sixth article in Wlingi Village, Wlingi District, with pre-experimental One group pretest posttest design. Respondents consisted of 4 first trimester primigravida mothers with emesis gravidarum. The intervention given in this study was acupressure at the P6 point 1-2 cm deep using the thumb for 15 minutes on each side of the hand. The sixth study showed that there was a significant reduction in the frequency of vomiting in respondents after acupressure was performed at point P6. The seventh article takes research in India. This study did not use a control group, with the number

of respondents being 35 pregnant women. Pregnant women aged between 23 and 34 years, gestational age less than 12 weeks, and who experience nausea with or without vomiting. The intervention given is using an acupressure bracelet at point P6. This treatment must be carried out 4 days, the first 3 days being the control phase), for 10 days. The bracelet is used four times a day for 10 minutes on each hand. The fifth article shows that acupressure at the P6 point is useful for reducing nausea, vomiting and dry vomiting.

The eighth article takes research from Surabaya, the research design used is Quasi experimental, namely observations carried out twice, namely before the experiment and after the experiment. The population is all pregnant women in the first trimester at BPM Afah Fahmi A.Md Keb. Surabaya as many as 15 people. The sampling technique uses purposive sampling with inclusion sample selection criteria; a) First trimester pregnant women who experience nausea and vomiting at BPM Afah Fahmi A.Md. Keb. Surabaya. b) The patient is willing to be given acupressure techniques. c) Pregnant women whose frequency of nausea and vomiting is <5 times a day. The intervention given was acupressure at the Nei Guan, Zu San Li and Gong Sun points for 9 days but the first observation (pre test) was carried out. The results of data analysis using the Wilcoxon test in this study showed ($P < 0.05$) that there was an effect of giving acupressure techniques on reducing nausea and vomiting in first trimester pregnant women at BPM Afah Fahmi A.Md Keb Surabaya (Meiri and Wiwik. 2019).

The ninth article takes research in Sidoarjo, the population is pregnant women in the first to second trimester of pregnancy who experience nausea and vomiting. This research uses quasy-experiment research with a pre-post test control group design approach. This design attempts to reveal a causal relationship by involving a control group in addition to the intervention group with a sample size of 22, namely 11 people given the intervention and 11 people as controls. In the treatment group, acupressure was performed using the thumb at pericardium point 6, which is located 3 fingers above the wrist in line with the middle finger, which was done once a day for 2 minutes. This acupressure is carried out for 7 days. Causation testing is carried out by comparing the pre-test in the intervention group with the control group, as well as the post-test in the intervention group and the control group. The results of this study show that based on the Independent T-test to differentiate the degree of nausea and vomiting using the PUQE score, where after acupressure was carried out in the intervention group and the control group, the value $p = 0.010$ and the value $\alpha = 0.05$ means $p < \alpha$, meaning that there is a significant difference in PUQE scores between the intervention group and the control group after acupressure was carried out. So in this study it was concluded that acupressure was effective in reducing nausea and vomiting (Handayani et al. 2019).

CONCLUSION

Based on several literature reviews that have been analyzed by the author, it can be concluded that the use of the pericardium 6 acupressure method in pregnant women in reducing nausea and vomiting shows its effectiveness. However, it is more effective in treating nausea and vomiting in pregnant women if acupressure can be combined with other complementary therapies that can mutually support the antiemetic effect on the patient. And in acupressure treatment there is no need to take medication, because with acupressure therapy the body already contains medication, which must be reactivated by the body's nerve cells.

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