



Original Article

The Use of Olive Oil for Reducing the Complaint of Itching Related to Striae Gravidarum in Pregnant Women

Nita Dwi Astikasari, Riza Tsalatsatul Mufida, and Shanty Natalia

Faculty of Nursing, Health Sciences Institute STRADA, Kediri, East Java, Indonesia

ABSTRACT

Introduction: This study is regarding the incidence of complaints of itching made by pregnant women, one of which is caused by striae gravidarum. The appearance of striae gravidarum, already triggered by the occurrence of stretchmarks, is present on the surface of the skin due to radical weight loss over a short period of time. The purpose of this research was to learn about the use of olive oil to reduce the itching complaints of striae gravidarum among the expectant mothers in the village of Anyer Ponggok Ringin Blitar.

Methods: The research design used was True Experimental research. The population examined was the total number of pregnant women in the village of Ringin Anyar, totaling 30 pregnant women. The final respondents totaled 27. The design used was a technical pre-post test control group. The method of sampling used was simple random sampling. The research instrument used was olive oil for 3 days. The research results were then analyzed using the Wilcoxon and Mann-Whitney tests.

Results: The results of the analysis showed there to be no difference before or after being given the olive oil to treat the itching of the pregnant women in the village of Ringin Anyar Ponggok Blitar. The prevalence of events in Puskesmas ponggok states that on June 2nd 2016, out of the 28 pregnant women who were examined, 17 of them experienced itching called striae gravidarum.

Conclusion: Based on the results of the research, it is expected for all of the expectant mothers to keep their skin moist with olive oil at the beginning of the second trimester in order to reduce the rate of itching in pregnancy.

ARTICLE HISTORY

Received: Feb 27, 2020

Accepted: April 1, 2020

KEYWORDS

pregnant women; itching,, olive oil

CONTACT

Nita Dwi Astikasari

✉ nieta.strada@gmail.com✉ Faculty of Nursing, Health
Sciences Institute STRADA, Kediri,
East Java, Indonesia

Cite this as: Astikasari, N. D., Mufida, R. T., & Natalia (2020). The Use of Olive Oil for Reducing the Complaint of Itching Related to Striae Gravidarum in Pregnant Women. *Jurnal Ners, Special Issues*, 466-469. doi: [http://dx.doi.org/10.20473/jn.v15i2\(si\).20510](http://dx.doi.org/10.20473/jn.v15i2(si).20510)

INTRODUCTION

The benefits of olive oil have been known to maintain beauty. Olive oil comes from the olive plants that grow in the Mediterranean region which provides a lot of sun intensity. Olive oil is very well known in the world of beauty, in addition to the culinary sphere and the health sector. This is due to the nutritional content of the olive oil (Damayanti, 2016).

In every 100 grams of olive oil there are the following nutritional values: energy-3701 kJ (885 kcal), carbohydrates-og, fat-100g, saturated fat (14g), monounsaturated fat (73g), polyunsaturated fat

(11g), omega-3 fats (11g) <1.5 g), omega-6 fat (3.5-21 g), protein - 0 g, vitamin E - 14 mg (93% of the recommended daily intake for adults) and vitamin k - 62 mg (59% of recommended daily intake for adults). The benefits of olive oil include providing the skin's natural moisture, preventing premature aging, removing anti-inflammatory acne stains, controlling blood pressure, cholesterol, cancer prevention, stroke prevention, natural hair lotion and moisturizing for the purpose of hair growth (Anonymous, 2014).

In some articles, olive oil can also be used to deal with the problem of discomfort in pregnant women, especially itching in the abdominal area where there

is an emergence of striae gravidarum. This is because olive oil contains a lot of vitamin E which can moisturize the skin due to the onset of striae gravidarum. Itching is an irritating skin sensation with marked discomfort that causes the compulsion to scratch it. According to Dr. Tjut Nurul Alam Jacoeb Sp. KK (K), generally pregnant women have more sensitive skin than women who are not pregnant. The skin stretches and eventually this causes striae. This eventually causes itching because the skin loses the dermis layer and so the skin loses moisture (Contributor wikipedia, 2014).

Striae are a form of colorless scarring on the skin. Over time, it might decrease but it won't disappear completely. Striae are formed during pregnancy usually during the last trimester, sometimes appearing on the abdomen but also often occurring on the breasts, thighs, hips, lower back, and buttocks in medical terms known as striae gravidarum. The striae gravidarum that appears during pregnancy often causes annoying itching. Skin problems like this are very common, especially in women who are pregnant. The itching felt on the surface of the abdominal skin is the first sign of the emergence of striae gravidarum. The itchy skin on the area that arises due to striae gravidarum occurs due to the skin losing moisture. The skin becomes dry so many pregnant women experience blisters or sores due to excessive scratching (Contributor Wikipedia, 2016).

A research study by the British Journal of Dermatology shows that the incidence of striae gravidarum in pregnant women ranges from 50-90%. From the 27 skin samples taken from pregnant women, it states that striae gravidarum forms in more than one area around the abdomen and less in the hip area (Manuaba, 2008).

The prevalence of events in Puskesmas ponggok states that on June, out of 27 pregnant women examined, 17 of them experienced itching called striae gravidarum. Some of the pregnant women do not pay attention to these symptoms so many pregnant women experience blisters and sores on the skin due to excessive scratching because of the onset of itching (Covas MI, 2006).

The emergence of striae gravidarum is thought to be triggered by stretching the surface of the skin due to radical weight gain over a short time. According to Dr. Hardy Suwita Sp.KK, a specialist from Satya Nagara Hospital, striae gravidarum will appear in the areas of skin that are easily stretched.

The process of the formation of striae begins with the accumulation of fat under the skin. As is known, a large part of a woman's body is formed by fat which is concentrated in certain parts when the body weight increases drastically. The dermis layer that is above the fat layer stretches radically. The skin layer contains many blood vessels and young skin cells can be broken. This will bring out purple streaks accompanied by itching. This purple color appears as a result of the activity of skin pigmentation through melanocytes caused by tears in the dermis of the skin. These tears will change color to white as a sign of the

formation of new tissue, which has a different color from the original skin color (Nurcahyani, 2013).

Olive oil for the treatment of striae during pregnancy is one of the best alternatives, and it is used to massage the area where there is an emergence of striae gravidarum. This will help to improve the blood circulation to the skin. Leaving it for one hour allows the skin to absorb vitamins optimally. It is done regularly every day at least 2-3 times when the skin is moist, for example, after bathing (Bawilan, 2009).

Based on this description, the researchers were interested in conducting research with the title "The use of olive oil (virgin olive oil) to reduce the complaint of itching related to striae gravidarum among the pregnant women in the village of Ringin Anyar Ponggok Blitar."

MATERIALS AND METHODS

This research was a True Experimental study with a pre-test control group design. This design involved two groups of subjects. One was given the experimental treatment (the experimental group) and the other was given nothing (the control group). The sample in this study was a portion of pregnant women who were experiencing itching due to striae gravidarum. The sampling technique was accidental sampling with a homogeneous sample as chosen by the researchers (Nursalam, 2008). The research instrument used was the awarding of olive oil for 3 days. The research results were then analyzed using the Wilcoxon test and the Mann-Whitney test.

RESULTS

Differences in itching due to striae gravidarum among pregnant women before and after being given olive oil (virgin olive oil)

Based on Table 4.1, it can be known that in the control group, the respondents with moderate itching tended to experience moderate itching before and after being given the olive oil (virgin olive oil) to the amount of 71.4% (5 respondents). The Wilcoxon test obtained a p value = 0.157 (less than 0.05) so it can be concluded that there was no difference in itching before and after being given olive oil (virgin olive oil) in the control group in Ringin Anyar Village, Ponggok District, Blitar Regency.

Based on Table 2, it shows that in the treatment group, the respondents with moderate itching tend to experience mild itching before and after being given the olive oil (virgin olive oil) which is equal to 42.9% (3 respondents). From the Wilcoxon test result, a p value = 0.046 was obtained.

Differences in itching due to striae gravidarum among the pregnant women in the control and treatment groups

Based on Table 3, it can be seen that the itching caused by striae gravidarum among the pregnant women in the control group is in the moderate

Table 1. Cross-tabulation between the itching before and after being given the virgin olive oil in the control group

Itching	Before		After	
	Σ	%	Σ	%
Mild	1	14,3	0	0
Medium	6	85,7	6	85,7
Severe	0	0	1	14,3

Wilcoxon signed rank test, p value= 0,157

Table 2. Cross-tabulation between the itching before and after being given virgin olive oil in the treatment group

Itching	Before		After	
	Σ	%	Σ	%
Mild	0	14,3	3	42,9
Medium	6	85,7	4	57,1
Severe	1	14,3	0	0

Wilcoxon signed rank test, p value= 0,046

Table 3. Differences in the percentage of itching due to striae gravidarum among the pregnant women

Post-Itching	Control group	Treatment group
Mild	0	42,9
Medium	85,7	57,1
Severe	14,3	0

Mann Whitney test, p value= 0,044

category at 85.7% (6 respondents). The itching due to striae gravidarum for the pregnant women in the treatment group is in the moderate category at 57.1% (4 respondents). From the results of the Mann Whitney test, the p values = 0.044 (smaller than 0.05) so it can be concluded that there are differences in itching due to striae gravidarum among the pregnant women between the control group and the treatment group. This means that there is an effect due to giving olive oil (virgin olive oil) for the itching due to striae gravidarum.

DISCUSSION

Itching due to striae gravidarum among the pregnant women before being given olive oil (virgin olive oil)

From the results of the data collection looking at 14 pregnant women in Ringin Anyar Village, Ponggok District, Blitar Regency, it was found that in the control group and treatment group, most pregnant women experienced moderate itching before being given the olive oil (oil virgin olive oil) treatment at 86.7% (6 respondents).

Itching due to striae gravidarum among the pregnant women after being given olive oil (virgin olive oil)

From the results of the data collection looking at 14 pregnant women in Ringin Anyar Village, Ponggok District, Blitar Regency, it was found in the control group, most of the pregnant women experienced moderate itching at 85.7% (6 respondents). In the treatment group, the majority of pregnant women experienced moderate itching after being given olive oil (virgin olive oil) which amounted to 57.1% (4 respondents). In the control group, it was found that pregnant women with moderate itching tended to

still experience moderate itching before and after being given olive oil (virgin olive oil) equal to 71.4% (5 respondents). In the treatment group, pregnant women with moderate itching tend to experience mild itching after being given olive oil (virgin olive oil) equal to 42.9% (3 respondents). The Wilcoxon test results obtained a p value = 0.157 (smaller than 0.05). It can be concluded that there was no difference in itching before and after being given olive oil (virgin olive oil) in the control group. The Wilcoxon test results in the treatment group obtained a p value = 0.046 (smaller than 0.05) so it can be concluded that there were differences in itching before and after being given virgin olive oil in Ringin Anyar Village, Ponggok District, Blitar Regency. This indicates that the administration of olive oil (virgin olive oil) can reduce the itching due to striae gravidarum among pregnant women.

Effect of itching due to striae gravidarum among the pregnant women in the groups that were given and not given olive oil (virgin olive oil)

Based on the results of the study, itching due to striae gravidarum among the pregnant women in the control group in the moderate category amounted to 85.7% (6 respondents). Itching due to striae gravidarum among the pregnant women in the treatment group in the moderate category amounted to 57.1% (4 respondents). From the results of the Mann Whitney test, the p value = 0.044 (smaller than 0.05). It can be concluded that there is a difference in itching due to striae gravidarum for pregnant women between the control group and the treatment group. This means that there is an influence of olive oil (virgin olive oil) against itching due to striae gravidarum among the pregnant women in Ringin Anyar Village, Ponggok District, Blitar Regency. This reinforces that olive oil (virgin olive oil) reduces the

itching in pregnant women due to striae gravidarum. In the control group, the itchiness experienced by the pregnant women tended to be persistent and there was severe irritation due to constant scratching.

The high content of vitamin E in olive oil is beneficial for skin health. It is known that vitamin E has been proven to maintain skin health and elasticity. Diane Irons, author of the "911 beauty secret: an emergency guide looking Great at Every Age, Size and Budget", explains that the powerful antioxidant power of vitamin E also helps the production of collagen. This is what gives skin its elasticity and it also gives moisture back to the skin caused by strokes or scars, as in striae gravidarum (Taavoni S, 2011).

With regular treatment using olive oil to treat striae gravidarum, there will be a reduction in the incidence rate so as not to cause excessive itching. Itching is not dangerous for either the mother or fetus. Itching cannot cause infant death and it does not interference in the growth of the baby. However, good care is needed to avoid scars which can lead to a negative body image due to having unclean skin. In addition, a reduction in itching can be overcome by wearing clothes that are not too tight. The pregnant women should be in a relaxed state due to excessive anxiety, tension and emotional instability being a potential trigger for itching (Yana, 2014).

CONCLUSION

There is a difference in itching due to striae gravidarum among the pregnant women before and after being given olive oil (virgin olive oil) so it can be used to reduce the incidence of itching due to striae gravidarum during pregnancy.

REFERENCES

- Anonymous. (2014). Fakta Stretch Mark dan Cara Mengatasinya.
- Bawilan, A. S. (2009). Manfaat dan Khasiat Minyak Zaitun.
- Contributor wikipedia. (2014). Stretchmarks.
- Contributor Wikipedia. (2016). zaitun.
- Covas MI. (2006). Komponen kecil minyak zaitun.
- Damayanti. (2016). Stretch marks.
- Manuaba. (2008). Ilmu Kebidanan, Penyakit kandungan & Keluarga Berencana untuk Pendidikan Bidan.
- Nurchayani. (2013). kenali penyebab (gatal) saat hamil.
- Nursalam. (2008). Konsep dan Penerapan Metodologi Penelitian Ilmu Keperawatan. surabaya.
- Taavoni S. (2011). Efek minyak zaitun terhadap striae gravidarum dalam trimester kedua kehamilan.
- Yana, Y. (2014). manfaat minyakzaitun dan efek.