



Ovarian Cysts Treatment and Recovery Using Herb Medicine

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Abstract. Ovarian cysts are fluid-filled sacs in the ovaries. Ovarian cysts generally occur in women at productive age (20-40 year). Ovarian cysts are usually harmless and may disappear by itself. However, it can be dangerous becoming cancer. This study was carried out to prevent and treat patients with ovarian cysts in order to improve the birth rates. The method used is by consuming Indonesian herbs including neem leaf extract, white ginger, curcuma manga combined with nigella sativa within one month. After using the herbs, it was performed ultrasound to see any changes. The results of this study showed the results of ultrasound at the initial condition was 1.78 cm x 1.3 cm, the second ultrasound after 5 months without consuming the herbs was 6.04 cm x 5.12 cm, and the following 1 month after consuming the herbs decreased in size of 2.98 cm x 2.10 cm. The conclusion of this study is by consuming the herbs, the ovarian cysts decreased in volume. This research needs to be continued so that the results of this study produce better results, both from the dose of herbs and the consumption time, so that it will produce better results and be more useful for the wider community.

Keywords: Ovarian Cysts, Treatment, Herbal, Medicine.

1 Introduction

Ovarian cysts are fluid-filled sacs that develop in the ovaries. This disease is very common and usually does not cause any symptoms. The ovaries have 2 main functions: to release an egg approximately every 28 days as part of the menstrual cycle, to release the sex hormones estrogen and progesterone, which play an important role in reproduction. Ovarian cysts may affect both ovaries simultaneously, or may affect only 1 ovary. Ovarian cyst symptoms usually cause symptoms if they rupture, are very large or twisted and then block the blood supply to the ovaries [1][2].

In these cases, patients may experience pelvic pain and that can range from dull and severe sensations to sudden, severe, and sharp pain during sex. The patients may also experience the difficulty to defecate. Other symptoms are frequent urge to urinate, having heavy and irregular periods, or the periods that are lighter than usual, bloating and swollen stomach feeling very full even though they have just small food. This condition may also lead to the difficulty of getting pregnant, even though fertility is not usually affected by the ovarian cysts. The initial sign of this disease is sudden experience of severe pelvic pain and feeling pain in the abdomen and also feeling nausea or vomiting.

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Z. B. Pambuko et al. (eds.), *Proceedings of 5th Borobudur International Symposium on Humanities and Social Science (BISHSS 2023)*, Advances in Social Science, Education and Humanities Research 856,
https://doi.org/10.2991/978-2-38476-273-6_95

According to demographic surveys, it was reported that the prevalence of ovarian cysts in Indonesia is 37.2%. From the 23,400 people who experience ovarian cysts, 13,900 of them died due to the disease [3].

There are 2 main types of ovarian cysts, namely: functional ovarian cysts are cysts that develop as part of the menstrual cycle and are usually harmless and short-lived. This is the most common type. Pathological ovarian cysts are cysts formed as a result of abnormal cell growth. This is much less common. Ovarian cysts can sometimes also be caused by an underlying condition, such as endometriosis. Most ovarian cysts are noncancerous (benign), although a small number are cancerous (malignant). Cancer cysts are more common in people who have gone to menopause period [2][4].

The cause of ovarian cysts may be known from the diagnose. If a medical doctor diagnoses that a patient suffers from ovarian cysts, the patient will be suggested for ultrasound check. If a cyst is identified during an ultrasound check, then it should be monitored with repeated ultrasound checks within a few weeks. The doctor may also suggest consulting with gynecologist. If there is concern that the cyst may become cancerous, the doctor will also perform blood tests to look for high levels of chemicals that could indicate ovarian cancer. However, high levels of chemicals don't always mean the patient has cancer, as high levels can also be caused by non-cancerous conditions, such as: endometriosis. pelvic infection menstrual fibroids. Therefore, further checks may be needed to assure the presence of cancer. The necessity of ovarian cysts treatment is based on: its size and appearance, whether there are other symptoms, whether it has menopause[5].

In most cases, the cyst will disappear after a few months. Further ultrasound examination may be used to confirm this. If postmenopausal, the risk of developing ovarian cancer is slightly higher. Regular ultrasound checks and blood tests are usually recommended for a year to monitor the cyst. Surgical treatment to remove the cyst may be necessary if the cyst is large, causes symptoms or lead to become cancerous [6]. Ovarian cysts usually don't prevent pregnancy, although this can sometimes indirectly cause the difficulty to have pregnancy. If it does require surgery to remove the cyst, the surgeon must do any efforts to maintain fertility. The surgery should be carried to only remove the cyst and leave the ovary intact, or only remove 1 ovary. In some cases, surgery is surgically removed both ovaries, in which case it will no longer produce eggs. It is necessary to consult with the surgeon about the potential impact on fertility before surgery [7].

For patients who do have to require surgical treatment, there are two types of surgery and need to be considered with the patient's condition, namely choosing laparoscopy or laparotomy. The both choices have significant advantages and disadvantages. Laparotomy is usually preferred if the patient's hemodynamics are unstable because it allows for faster admission and direct visualization of the structures involved but results in larger incisions and increased duration of postoperative pain, hospital stay, and recovery time. Laparoscopy is a longer procedure with smaller incisions with less risk of infection and blood loss when compared to laparotomy. However, the longer time spent on surgery leads to increased exposure to general anesthesia and increases the risk of damage to internal organs and blood vessels [8][9][9].

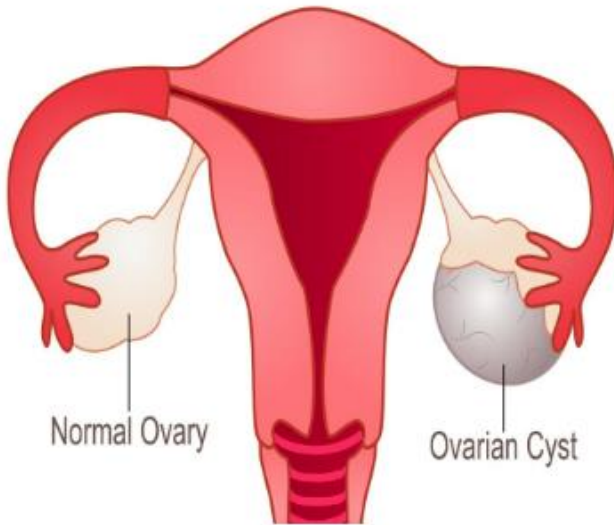


Fig. 1. Ovarian Cyst [1]

In Fig. 1, it can be seen the image of female reproductive organs seen cross-sectionally, visible uterus with ovaries on the right and left. The right ovary is normal, and the left ovary has an enlarged ovarian cyst. If the cyst is enlarged and causes symptoms, such as abdominal or pelvic pain, fever, bleeding, cold sweats, or weakness, surgical removal of the cyst or surgery can be done. How to handle ovarian cysts will be adjusted to several factors such as age, symptoms and causes of cysts [5].

A lot of research has been done in the world of health regarding the handling of various health problems, as well as the handling of ovarian cysts. But in the treatment of ovarian cyst disease, some researchers have developed treatments with some herbs that have been widely done. In this research, neem leaves, white ginger, curcuma manga and black cumin were selected for the treatment of ovarian cysts. The herbs have anti-oxidant and anti-inflammatory effects, which have been used for the treatment of some diseases. They have minimal side effects, and from the financial point of view, they are very cheap. Moreover, in this case the patient treated is young and unmarried, so choosing the nonoperative path is preferred [10,11]

2 Method

The method in this research is experimental using several Indonesian herbs, namely neem leaf extract (*Azadiracta Indica*), white ginger (*Curcuma Zedoaria*), curcuma manga (*Curcuma Manga Val Van Zip*) dan black cumin (*Nigella Sativa*). To serve the medication, the mix of 1.5 gr dried neem leaves, 3 slices of dried white ginger and 3 slices of dried curcuma manga are boiled with 500 ml of fresh water. Take 200 ml, 2 times per-day, together with 2 capsules of *Nigella Sativa* 600 mg each. The treatment

was given for 1 month. The observation on size of the cyst was taken regularly to get the progress of cysts volume.

3 Result and Discussion

In this study, a female unmarried patient aged 24 years, experienced lower abdominal pain during menstruation. Pain is intermittent and is characterized by sharp pain. Irregular menstrual cycles, and abnormal vaginal bleeding. After having medical checks, palpation of the ovaries on bimanual test to determine the location, size, consistency, degree of tenderness, and mobility does not help to establish the diagnosis. Therefore, additional checks were carried out to help establish the diagnosis, i.e. ultrasound tests. From the first ultrasound tests conducted on August 15, 2022, it could be seen that there was a mass measuring 1.78 cm x 1.3 cm. This is the initial case. Then the patient is observed for 5 months to see the next progress whether the mass can shrink on its own or even increase in size (Table 1).

Table 1. USG result of ovarian cysts

No	Chacking Date	Ultrasound Results	Remark
1	August 15, 2022	1.78 cm x 1.3 cm	Initial Case
2	Januaty 9, 2023	6.04 cm x 5.12 cm	Increase
3	February 7, 2023	2.98 cm x 2.10 cm	Decrease

After 5 months, on January 9, 2023, the patient still experiences the same problem/symptoms and felt that there is a lump in the lower side of the abdomen. Then a second ultrasound test was carried out detecting a mass with a size of 6.04 cm x 5.12 cm, which means that the mass enlarged. Because the mass increases in size quickly, the patient is advised to undertake surgical removal of ovarian cysts. Because the patient is young and unmarried, other alternatives were sought instead of ovarian cyst removal surgery. The reason is related with the possibility of having children. With this consideration, the patient chose to use herbal medicine for the treatment of ovarian cysts.

Patients began to use herbal remedies after the second ultrasound by maintaining a healthy diet and life. Day by day, her illness gradually reduced. After a month of taking the herbal medicine, on February 7, 2023, the patient did a third ultrasound test and the result was the mass reduced to 2.98 cm x 2.10 cm. It means there is a decrease in mass size. From the results of this research, it can be observed that in the initial observation on the first ultrasound as shown in Fig. 2, there is a mass larger than the normal size of the ovary so that it has caused complaints and symptoms. Most ovarian cysts are discovered by chance and tend to be benign, so the prognosis is good. In general, 70% to 80% of cysts heal spontaneously.

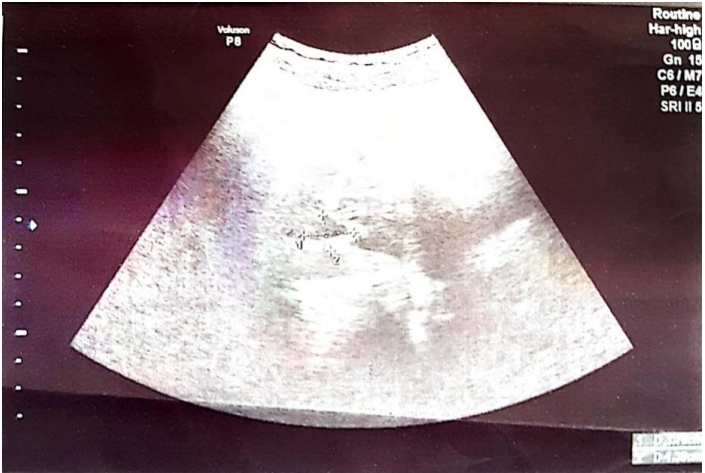


Fig. 2. The 1st USG: Initial Check

The ovarian cysts were again observed for 5 months. It did not heal or shrink, but on the second ultrasound examination it can be seen in Fig. 3, that there is a change in mass that it became larger and complaints and symptoms were more severe. Ovarian cysts can cause complications that require emergency treatment, especially if there is rupture, bleeding, and turnover. The most common emergency is ovarian torsion, which is the twisting of part or all of the ovarian vessels resulting in obstruction of blood flow to the ovaries. Because of complaints of pain that got worse if menstruation and on physical test palpable lumps in the lower abdomen, doctors recommend surgical removal of ovarian cysts. But also considering the age of the patient is still young and unmarried, it is necessary to find a more appropriate solution.

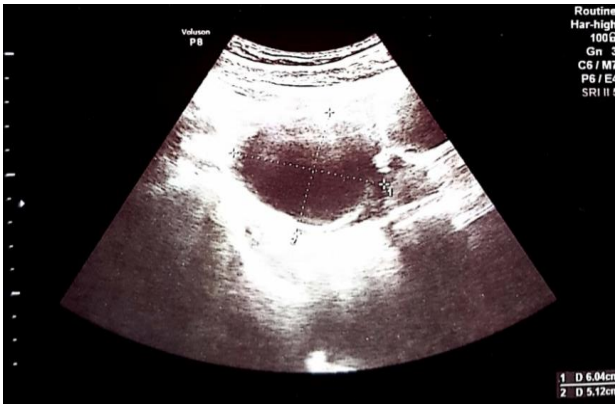


Fig. 3. The 2nd USG: Volume Increases

The selection of herbal remedies that have been carried out for one month, with neem leaf extract, white ginger, curcuma manga and black cumin enabled reducing the size

of ovarian cyst masses as seen in Fig. 4. Complaints felt by the patient also decreased. Since the presence of a decrease in the volume of ovarian cysts and complaints decreases, treatment with herbs continued.



Fig. 4. The 3rd USG: Volume Decreases

Treatment of ovarian cysts has been widely developed in medicine, there are several different treatment options that can be done, but ultimately the management depends on the age of the patient, menopausal status, cyst size and the characteristics of the cyst that leads to malignancy. Cysts with a size of less than 10 cm are usually benign, regardless of the age of the patient, do not show symptoms, their treatment is observed conservatively with periodic ultrasound test, because in general cysts can heal spontaneously without intervention. If the cyst does not heal after several menstrual cycles, it is most likely not a functional cyst, and needs further observation [2].

Currently the treatment of ovarian cysts is not only medical, but treatment with herbal remedies has also been developed. Research on herbs in Indonesia has been widely conducted and resulted in the discovery of prospective treatments for several diseases that use Indonesian herbs. Also, for the treatment of ovarian cysts have begun research using Indonesian herbs. Neem leaf extract, white ginger, curcuma manga, and black cumin contain active compounds, i.e. anti-oxidants and anti-inflammatory which can help the healing process of ovarian cysts [10,11].

Treatment of ovarian cysts medically is widely applied in hospitals throughout Indonesia, but medical treatment requires large finances, for patients who do not have sufficient money sometimes need alternative treatment that is cheaper and has minimum side effect. In this case, herbal medicine is the most appropriate choice, but the herbal medicine must be the result of qualified research, and the dose of use must be strictly considered [8]. This study used neem leaf extract, white ginger, curcuma mango and black cumin capsules whose effects support each other in reducing the mass volume of ovarian cysts [12].

This research needs to be continued by determining the combination with other herbal medicines and the right dose for ovarian cyst treatment. Therefore, further researches are necessary to refine the herbs in reducing the problems. So that ovarian cyst

can be treated with Indonesian herbal medicine with minimal side effects and financial spending is not too high. The prospect of herbal treatment is quite good and very promising for the pharmaceutical industry in Indonesia.

4 Conclusion

From the results of the study found that the combination of herbal ingredients namely neem leaf extract, white meet, mango meeting, and black cumin (*Nigella sativa*) can reduce the size of enlarged ovarian cysts. However, the most optimal dose needs to be determined in order to obtain the right treatment with minimal side effects. In addition, further research is needed to determine the best composition and determine the performance of each component in the process of reducing ovarian cysts with these herbal interventions

Acknowledgments. The author would like to kindly acknowledge Kusuma Husada Surakarta University for their support on publishing this paper.

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