Original Article

Effect Of Giving Cork Fish Capsules To Healing Sectio Secarea Surgery Wounds

Andi Indra¹

¹Students of Midwifery D-IV Study Program Surya Mitra Husada Indonesia Health Sciences Institute

ARTICLE INFO

ABSTRACT

Background: Sectio caesaria (SC) is a method of giving birth to the fetus using an incision in the stomach and uterus. Wounds after surgery for sectio caesarea will undergo a wound healing process. Cork Fish Capsules are beneficial to postoperative patients, which is to increase their albumin to normal. The Purpose of Knowing the Effect of Cork Fish Capsules on the Healing of Sectio Secarea Surgical Wounds in the Postpartum Room of Torabelo Sigi Hospital.

The design used in the study was quasi-experimental. The population is all post SC mothers in the post-partum room at Torabelo Sigi Hospital. The sample size was 20 respondents using the Independent Variable Purposive sampling technique. The research was the administration of cork fish capsules. The dependent variable is wound healing. Data was collected using a questionnaire, then the data were analyzed using the Wilcoxon test with a significance level of α ≤ 0.05

The results showed that almost all respondents in the experimental group had moderate wound healing before the intervention as many as 9 respondents (90%), had good wound healing after intervention as many as 9 respondents (90%), most of the control group respondents had moderate healing at the assessment 7 pretest respondents (70%), had moderate wound healing at posttest assessment as many as 6 respondents (60%). The statistical test results of the experimental group before and after the intervention with a <0.05 obtained p = 0.005 where H1 was accepted and H0 was rejected, meaning there was an effect of Cork Fish Capsules on the Healing of Sectio Secarea Operation Wounds in the Postpartum Room of Torabelo Sigi Hospital.

There is an effect of giving cork fish capsules to healing Sectio secarea surgery wounds in the postpartum room at Torabelo Sigi Hospital.

Keywords: Provision of cork fish capsules, wound healing, mothers with SC surgery

Corresponding Author Contact:
Andi Indra
Students of Midwifery D-IV Study Program Surya Mitra Husada
Indonesia Health Sciences Institute
Email: andiindra11@gmail.com
Introduction

The puerperium or puerperium begins after the birth of the placenta and ends when the uterine uterus returns to its state before pregnancy. In the puerperium, internal and external genitalia tools will gradually recover as they were before pregnancy. These changes in the genital organs as a whole are caused by involution. Sectio caesaria (SC) is a way of giving birth to a fetus by using an incision in the abdomen and uterus (Anderson, 2012). The puerperal period is a time that is very vulnerable to stress, especially in primiparous mothers so that it can make severe psychological changes (Brown, 2013). Midwives have a very important role in providing post partum care by managing midwifery care by collecting data, establishing diagnoses and action plans and implementing them to speed up the recovery process, prevent complications by meeting the needs of mothers and infants during the postpartum period.

According to the World Health Organization (WHO) (2015) almost 7% of SC births are infected. The Director General of Public Health of the Republic of Indonesia Ministry of Health in 2017 stated that in 2016 in Indonesia there were 5,112,269 birth mothers assisted by health workers, in East Java there were 609,279 birth mothers (Ministry of Health, 2017). Data from the Health Profile of Kediri City in 2015 amounted to 4,572 deliveries assisted by health workers (Suprapto, 2016). The results showed a significant relationship between husband's assistance with the level of maternal anxiety in dealing with the first stage of labor (Primasnia, 2013). The results of the 2016 study found that mothers during childbirth experienced mild anxiety as much as 50.0%, moderate anxiety 35.0%, experienced severe anxiety 10.0%, and anxiety category panic 5.0% (Rahmawati, 2016). Data from the Palu health office showed that the number of SC deliveries in one hospital was hammered in 2013 to reach 1,248 people and 7.3% had infections after SC delivery, the results of a preliminary study in the postpartum room of the Torabelo Sigi Hospital one month last in October 2018 found that there were around 50 SC patients, with 18 (36%) of whom had a surgical wound dehlicated after 7 days of SC, 9 (18%) of whom had poor nutrition, 6 (12%) of whom lacked personal hygiene and 3 (6%) of people due to lack of knowledge about SC wound care (Torabelo Regional Hospital Medical Record, 2018).

The wound after the sectio caesarea surgery will undergo a wound healing process consisting of 3 phases, namely the inflammatory phase, proliferation phase, and maturation phase. In the inflammatory phase, it requires good blood circulation to help meet the nutrition of cells in the blood and accelerate tissue growth. The wound does not show clinical signs of inflammation (rubor, dolor, calor, tumor) 3-4 days after surgery (Oswari, 2014). Factors that influence wound healing are age, nutrition, infection, circulation, oxygenation, hematoma, foreign body, ischemia, diabetes mellitus, wound condition, and medication.

The role of the midwife in the wound healing process of SC is very important, the length of the wound healing process can be caused by any germs that enter through the wound when personal hygiene is lacking and the patient’s immune system is decreased. In addition to doing wound care, especially in post-caesarean midwife patients need to do the best intervention to get the best wound healing process. Normal wound healing requires proper nutrition for the physiological process of wound healing depending on the availability of protein, vitamin C and zinc.

According to Wijianingsih research (2013), in the process of healing caesarean section requires intake or level of good nutritional requirements for the healing process of caesarean section in order to avoid infection after caesarean section. Cork fish capsules benefit postoperative patients by increasing their albumin to normal. Cork fish is very rich in albumin, one of the important proteins for the human body. Cork Fish
Capsules contain a lot of protein and albumin levels that reach 21%. The protein content of cork fish is 25.5%, higher than the protein content of milkfish 20.0%, carp 16.0%, snapper 20.0%, or sardines 21.1%, albumin is needed human body, especially in the process of healing wounds. Cork fish or channa striata are known to have higher types of nutritional content (Iswandiari, 2017). Based on this background, researchers are interested in researching with the title Effect of Giving Capsules of Fish Cork on the Healing of Sectio Secarea Surgical Wounds in the Postpartum Room of Torabelo Sigi Hospital.

### Method

The design used in the study was quasi-experimental. The population is all post SC mothers in the post-partum room at Torabelo Sigi Hospital. The sample size was 20 respondents using the Independent Variable Purposive sampling technique. The research was the administration of cork fish capsules. The dependent variable is wound healing. Data was collected using a questionnaire, then the data were analyzed using the Wilcoxon test with a significance level of $\alpha \leq 0.05$.

### Results

Table 1. Frequency Distribution of Experimental Group Respondents based on Wound Healing in the Postpartum Room of Torabelo Sigi Regional Hospital on July 7-August 7, 2019 (n = 20)

<table>
<thead>
<tr>
<th>No</th>
<th>Wound Healing</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Medium</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Good</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

The results showed that almost all respondents in the experimental group had moderate wound healing prior to the intervention of 9 respondents (90%), and almost all respondents had good wound healing after the intervention of 9 respondents (90%).

Table 2. Frequency Distribution of Control Group Respondents based on Wound Healing in the Postpartum Room of Torabelo Sigi Regional Hospital on July 7-August 7, 2019 (n = 20)

<table>
<thead>
<tr>
<th>No</th>
<th>Wound Healing</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Less</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>Medium</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Good</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

The results showed that most respondents in the control group had moderate wound healing at the pretest assessment of 7 respondents (70%), and most respondents had moderate wound healing at the posttest assessment of 6 respondents (60%).

Table 3. Test Statistics

<table>
<thead>
<tr>
<th>Test Statistics</th>
<th>Ex Exit-Healing Wounds (Posttest) - Ex Ex Wound Healing (Pretest)</th>
<th>Exit Wound Control (Posttest) - Ex. Control of Wound Healing (Pretest)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z</td>
<td>-2.828*a</td>
<td>-1.732*b</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>,005</td>
<td>,083</td>
</tr>
</tbody>
</table>

Statistical test of the experimental group before and after the intervention in this study with a <0.05 was obtained $p = 0.005$ where $H_1$ was accepted and $H_0$ was rejected, which means that there was an effect of the capsules of cork fish on wound healing of Sectio Secarea surgery in the puerperal room of Torabelo Sigi Regional Hospital.

### Discussion

Statistical test of the experimental group before and after the intervention in this study with a <0.05 was obtained $p = 0.005$ where $H_1$ was accepted and $H_0$ was rejected, which means that there was an effect of the capsules of cork fish on wound healing of Sectio Secarea surgery in the puerperal room of Torabelo Sigi Regional Hospital.
Postoperative injuries require a short amount of healing time. There is a healing phase that must be passed. Clean wounds are those that occur as a result of surgical incisions. To assess wound healing, you can use REEDA Scale. Where the wound is declared healed if the REEDA Scale value is zero. This means dry sores, no redness, swelling, unified tissue, and no pain when sitting and walking. Each factor (REEDA Scale) is given a score between 0 to 3 which presents the absence of signs of the highest level. Thus, the total scale score ranges from 0 to 15, indicating poor wound healing. Observations were made on the first day until the wound condition was declared healed (Rini, 2014). Cork fish / curse fish are fish that are often found in Indonesia, which are well known by old people used to accelerate the healing of circumcision wounds, wounds after giving birth, burns, and other injuries. Cork fish or channa striata are known to have a higher type of nutritional content. The protein content of cork fish is 25.5%, higher than the protein content of milkfish 20.0%, carp 16.0%, snapper 20.0%, or sardines by 21.1% (Iswandiari, 2017). Cork / curse fish have the highest protein content of albumin compared to albumin protein sources from other fishes, such as catfish, milkfish, carp, tilapia, and others. Including cork fish / curse fish protein content is also the highest compared to foodstuffs that have been known as sources of protein such as: eggs, chicken meat, and beef.

The composition of cork fish capsules in accelerating SC wound healing include Per 100 grams, egg protein content is only 12.8 grams, chicken meat 18.2 grams, beef 18.8 grams while cork fish / cursed fish reaches 25.2 grams. Very far adrift. The plus value of cork fish / other curse fish is that this fish has a very good digestibility value which reaches more than 90%. In addition, cork fish / cork fish calogene protein is also lower compared to cattle meat, which causes the texture of cork fish / fish curse is more tender compared to the others. The protein contained in cork fish / cursed fish is very easily digested and improves healing in patients with SC sores. Cork Fish Capsules can be an alternative. Because the properties are the same. With albumin levels reaching 21%, the price is much cheaper than the cost of the serum albumin infusion, which is given 1 capsule per day in the morning after eating.

**Conclusion**

1. The results of the study found that almost all respondents of the experimental group had moderate wound healing prior to the intervention of 9 respondents (90%), and almost all respondents had good wound healing after the intervention of 9 respondents (90%).

2. The results showed that most respondents in the control group had moderate wound healing at the pretest assessment of 7 respondents (70%), and most respondents had moderate wound healing at the posttest assessment of 6 respondents (60%).

3. Statistical test of the experimental group before and after the intervention in this study with a <0.05 obtained p = 0.005 where H1 was accepted and H0 was rejected, which means that there was an effect of the capsules of cork fish on wound healing of Sectio Secarea surgery in the puerperal room of Torabelo Sigi Regional Hospital.

**References**


Brown, J., 2013. *Pre-incision antibiotic prophylaxis reduces the incidence of post-caesarean surgical site infection.* Journal of Hospital Infection, 83(1),


Manuaba. 2010. Ilmu Kebidanan, Penyakit Kandungan, & Keluarga Berencana Untuk Pendidikan Bidan. Jakarta: EGC.


