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The Difference Effectiveness of Savlon and Nacl in Healing Post-operation Wound

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ABSTRACT

Patients undergoing surgery will be at risk of infection. The incidence of surgical wound infections can be monitored early, and prevention is done immediately by providing wound care following procedures and with appropriate aseptic techniques, including using NaCl 0.9% or Savlon. The purpose of this study was to determine the differences in Savlon administration and 0.9% NaCl compress in the postoperative wound healing process in the Wijaya Kusuma Hospital, Dr. R Soetijono Blora. The research method used was a quasi-experimental design. The researcher provided postoperative wound care with Savlon fluid in the treatment group and NaCl 0.9% as a control group starting on day 3, day 5, and day 7 in postoperative patients. Samples in the study were all postoperative patients treated in the Wijaya Kusuma Hospital, Dr. R Soetijono Blora for three months who met the inclusion criteria. The sampling technique was 15 patients as a treatment group and 15 people as a control group. Data collection techniques used observation sheets and were analyzed descriptively and inferentially by employing the Mann-Whitney test. The process of healing postoperative wounds to respondents during treatment in days 3, 5, 7 using Savlon and NaCl 0.9% indicated wound healing was largely quite good. There is no significant difference in postoperative wound healing between the use of 0.9% NaCl and Savlon based on Asymp. Sig> 0.05. Postoperative wound care using Savlon and NaCl 0.9% generated effective results in the wound healing process.

Keywords: *Surgery, wound, post-operation, wound, savlon, nacl*

I. Introduction

Patients who undergo surgery will be at risk of infection by 10% to 15%. Most of these infections occur in one of the four anatomic sites, namely surgical wounds, blood flow, urinary tract or respiratory tract. Surgical wounds have a relative possibility of wound infection depending on the type of injury based on the degree of wound contamination, i.e. clean wounds include 1% to 5%, contamination wounds 3% to 11%, contaminated wounds 10% to 17%, and dirty wounds more than 27%. [1] (Brunner and Sudarth, 2002)

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The occurrence of surgical site infections is a form of clinical negligence caused by microbes that attack patients who are acquired during hospitalization. [2] The antiseptic used in topical wound care is Savlon. Savlon is an antiseptic preparation that is only used topically and with minimal toxicity [3].

At the Hospital Dr. R Soetijino Blora, Central Java, surgery is quite high, based on data from January to February 2019, 46 operations were consisting of 12 primary operations and 34 moderate operations.

The incidence of surgical wound infections can be monitored early, and prevention is done immediately in an effective manner. Prevention of surgical wound infections can be done by providing wound care by procedures and with aseptic techniques by giving Savlon.[4] From this perspective, the authors are interested in researching the effect of differences in Savlon administration and 0.9% NaCl compress on the process of wound healing in the Wijaya Kusuma Hospital Dr. R Soetijono Blora, Central Java, Indonesia.

II. Materials and Methods

Type of research employed was experimental, quasi-experimental designs. Researchers provided postoperative wound care with Savlon fluid in the treatment group and NaCl 0.9% as a control group starting on day 3, day 5, and day 7 in postoperative patients. Samples in the study were all postoperative patients treated in the Wijaya Kusuma Hospital, Dr. R Soetijono Blora for 3 months who met the inclusion criteria. The sampling technique was 15 patients as a treatment group and 15 people as a control group. The technique of data collection was with observation sheets, and data were analyzed by using the Mann-Whitney test.

III. `Results and Discussion

The results of the analysis of differences in the postoperative wound healing process days 3, 5, 7 treated using 0.9% NaCl and Savlon were illustrated in the following description. The differences in the wound healing process using 0.9% NaCl and Savlon in Wijaya Kusuma Hospital Dr. R. Soetijono in day 3 produced Asymp. Sig value of 0.826 which means ρ is > 0.05, indicating there is no significant difference in postoperative wound healing between using NaCl 0.9% with Savlon. In day 5, Asymp.Sig value generated was 0.659 with ρ > 0.05, which means there is no significant difference in postoperative wound healing between the use of 0.9% NaCl with Savlon. Finally, in day 7, wound healing between treatment using NaCl 0.9% and Savlon denoted Asymp. Sig value of 0.643 and ρ > 0.05, which means there is no significant difference in postoperative wound healing between the use of 0.9% NaCl with Savlon .

One of the principles in wound care is the selection of liquid that needs to be considered in choosing a wound cleansing fluid. [5] However, the liquid used does not remove body fluids in the wound, does not cause accumulation of fluid in the tissue, does not damage the tissue and is not an excellent medium for bacterial growth. Savlon has a detergent effect that is useful for cleaning debris from wounds. [6]

Healing wounds using 0.9% NaCl indicated there were 6 respondents (40%) experienced perfect wound healing. This occurs because wound healing is influenced by various factors including vitamins and

minerals, amino acids, oxygen, immune system, personal hygiene. [7] However, researchers did not do detailed data collection on the nutritional status of respondents because it only focused on wound care material.

The difference in the healing process between wound care using NaCl 0.9% and wound care using the Mann-Whitney test has proven Savlon effectiveness by examining the Asymp.Sig value with $\rho > 0.05$ which means there is no significant difference in postoperative wound healing between uses NaCl 0.9% with Savlon.

By performing postoperative wound care with 0.9% NaCl besides being able to clean the wound, it can also moisturize the wound. [8] This is in line with the opinion of other researchers [9,10] which states that effective wound care is to keep the injury in a moist condition so that it can reduce pain and improve blood circulation to wounds.

IV. Conclusion

Based on the results of observations and data analysis, it can be concluded as follows: The

a. study of the 30 most age sample respondents was between 41 - 60 years, the sex of the most respondents was male, the education level of the majority of respondents was elementary, and the socio-economic majority of the respondents was earning between Rp. 1,000,000 up to Rp. 3,000,000.

b. Treatment using Savlon and NaCl 0.9% obtained wound healing mostly with quite good criteria.

c. The results showed no significant difference in postoperative wound healing between the use of 0.9% NaCl and Savlon.

Competing Interest

The authors of this paper have no competing interest to report.

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