

THE ASSOCIATION BETWEEN SERUM ALBUMIN LEVEL AND POST-LAPAROTOMY WOUND HEALING TIME AT DR. WAHIDIN SUDIROHUSODO HOSPITAL, SOUTH SULAWESI

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ABSTRACT

Background: Wound healing is generally the same for each individual but the outcome achieved depends on the biological condition of each individual, the location and extent of the wound. Malnutrition is one of the most late causes of wound healing. Protein plays an important role in wound healing and one of the most important elements of plasma protein is albumin. The state of albumin also affects the length of wound healing. From the results of several studies, there is a significant relationship between serum albumin and the length of wound healing. The purpose of this study was to determine the relationship of serum albumin with wound healing time in postoperative laparotomy patients.

Subjects and Method: This was a retrospective cohort study conducted at RSUP. Dr. Wahidin Sudirohusodo, Makassar, South Sulawesi, from January to October 2007. A total sample of 77 postoperative patients with laparotomy hospitalized in the Digestive Surgical Nursing Room were selected for this study. The dependent variable was wound healing time. The independent variable was serum albumin. The data were obtained from medical record and observation sheets. The data analyzed using the chi-square test.

Results: Albumin levels of the treated patients were between 2.1 gr/dL and 3.77 gr/dL. Wound healing time ranged from 7 to 94 days with an average of 10.09 days in patients with normal albumin level and 19.9 days in patients with low albumin level. There was a statistically significant relationship between serum albumin and wound healing time ($p < 0.001$).

Conclusion: Wound healing time is correlated with serum albumin level.

Keywords: postoperative laparotomy, albumin serum, wound healing time.

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