

ABSTRACT

STUDY OF ALBUMIN USE FOR DIABETIC GANGRENE PATIENTS (Study at Rumkital Dr. Ramelan Surabaya)

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Background: Gangrene is the death of tissue, also called necrosis, due to infection as a result of peripheral vascular disease. These infections cause an inflammatory reaction resulting in increased microvascular permeability, thereby increasing the transfer rate of albumin into the interstitial space. It also causes changes in the metabolic system, such as decreasing hepatic albumin synthesis rate and increasing albumin catabolism rate. All of these factors cause hypoalbuminemia, which may worsen the patient's gangrenous wounds and increase the morbidity/mortality risk. To overcome these conditions, intake of albumin is required to increase the albumin level and help patients' wounds heal.

Objective: The aim of this study was to analyze the profile of albumin used in diabetic gangrene patients and to identify the problems related to albumin treatment used.

Method: Data were collected retrospectively from 21 patients of diabetic gangrene who received albumin treatment while hospitalized in Rumkital Dr. Ramelan Surabaya between April 2013 to April 2015.

Results: The results showed that albumin has been administered to patients with albumin level $< 2,5$ g/dL and/or depend on patients' conditions. There were two types of albumin used, Human Albumin 20% and Human Albumin 25%, which each given in 100 cc. Albumin has been administered to patients once a day, till albumin level of patients reach $> 3,0$ g/dL or their conditions improved. Albumin total given were 1 – 2 times while patients hospitalized. Overall albumin level increased after administration was 0,4 g/dL. However, there were cases which albumin level decreased after administration, in this case related to debridement and/or amputation which patients choose to take. Most of all patients (71,4%) were improved their condition when discharged from hospital.