ABSTRACT

HEMOGLOBIN LEVEL IN CHRONIC KIDNEY DISEASE PATIENTS - COMPLICATIONS OF ANEMIA TREATED WITH PACKED RED CELLS (PRC)
(Study in Patients with Chronic Kidney Disease – Hemodialysis In Dr. Soetomo Teaching Hospital Surabaya)

The purpose of this study was to determine the profile of hemoglobin level and their fluctuations, to examine several factors that may affect the hemoglobin level, as well as side effects associated with the use of the PRC occurred in patients undergoing regular hemodialysis. This study was carry out in cohort studies and analyzed descriptively hospitalized patients in Hemodialysis Unit Dr. Soetomo Teaching Hospital Surabaya on 3 March to 26 May 2011. The sample of this study was 67 patients (18 inpatients and 49 outpatients). The result of this observation showed that the pretransfusion level of hemoglobin in hospitalized patients was in the range of 2.9 to 9.2 g/dL and outpatient was in the range 4.0-7.7 g/dL. The range of PRC given during hospitalized 3-30 days (average 6-10 days) is 1-11 pockets with the mostly received 3-5 pockets PRC, while outpatients received two pockets PRC which the interval transfusion is 4-104 days (average 21-30 days). 70.37% inpatients and 95.62% outpatients had pretransfusion hemoglobin did not reach the target. The level of hemoglobin could be associated with the BUN level, calcium level, and the storage of PRC. The side effects with the use of PRC were fluid overload (6.67%), hyperkalemia (5.33%), shivering (9.94%), itching without hypotension (9.36%), itching accompanied by hypotension (1.17%), and fever (1.75%). In this study explained that the use of PRC to covering anemia in CKD is not able to maintain level of hemoglobin and required alternative therapy besides PRC to maintain the level of hemoglobin.

Keyword: Chronic Kidney Disease, Anemia, Hemodialysis, Packed Red Cells (PRC), Side Effects, Descriptive Analysis.