ABSTRACT

Drug Utilization Study of Potassium Supplements in Hypokalemia Patients Receiving Intravenous Potassium Therapy

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Hypokalemia is a state of blood potassium concentration below 3,5 mEq/L which is caused by a decrease in the total body potassium amount or a disturbance in the movement of potassium ions into cells. This study aims to determine the pattern of use of potassium therapy in hypokalemia patients receiving intravenous potassium therapy. The data obtained from previous studies related to the use of intravenous potassium therapy for hypokalemia patients at Hospital X for the period November 2015-September 2017. 41 patients who met the inclusion criteria were classified into three category hypokalemia, mild hypokalemia (4,9%), moderate hypokalemia (61%) and severe hypokalemia (34,1%). Types of intravenous potassium were potassium infusion A (23,8%), potassium infusion B (45,3%), potassium infusion C (7,1%) and potassium infusion D (23,8%). The rate of potassium infusion given was potassium infusion A 1,7 mEq/hour, potassium infusion B 4,2 mEq/hour, potassium infusion C 1,2 mEq/hour and potassium infusion D 2,5 mEq/hour. The success of hypokalemia correction was achieved in 46,3% (19 patients) and the unsuccessful correction was achieved in 53,7% (22 patients). Factors that affect the increase in potassium concentration are the therapeutic dose and the rate of potassium infusion, while the type of intravenous potassium supplementation has no effect on the increase in potassium. It can be concluded that the use of hypokalemia therapy is in accordance with the clinical condition of the patient and the guidelines for the management of hypokalemia therapy.

Keywords: Hypokalemia, potassium disorders, intravenous potassium