ADHERENCE OF THE HOSPITAL CLINICAL MANAGEMENT UNITS TO THE CENTRE'S PROTOCOL FOR THE SAFE USE OF INTRAVENOUS POTASSIUM

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Background and importance

Following the recommendations of the Spanish Delegation from the Institute for Safe Medication Practices (ISMP), the Safety Commission of our hospital developed a program to promote the safe use of intravenous potassium between 2012 and 2015. An audit carried out found that the consumption from concentrated solutions (CS) was 10 times higher than from prediluted solutions (PS). A protocol was spreaded in the Service Areas (SA) through institutional messages and training sessions. As a consequence, the amount of potassium consumed from PS was 3,7 times higher than from CS.

Aim and objectives

In 2019, the International Medication Safety Network (IMSN) included the use of intravenous potassium as one of the main measures to avoid serious medication errors. The objective is to determine the degree of adherence to the intravenous potassium program after its completion 5 years ago.

Material and methods

Retrospective observational study between June and December 2019. Potassium CS and PS used in our hospital were identified and the potassium mEQs consumed in both ways were calculated.

Intensive Care Unit was excluded because its use of CS is accepted by the ISMP.

Results

Two types of CS were found: potassium chloride 2 mEQ/mL and monopotassium phosphate 1 mEQ/mL. Regarding PS, eight types were available: glucose 5% + 10 mEQ K, glucose 5% + 15 mEQ K, glucose 5% + 20 mEQ K, glucosaline + 10 mEQ K, glucosaline + 15 mEQ K, physiological + 10 mEQ K, physiological + 15 mEQ K and physiological + 20 mEQ K.

Potassium consumption was 501,650 mEQ in CS and 125,620 mEQ in PS. Therefore, the ratio of potassium consumed using CS was 4 times higher than that consumed in PS.

Conclusion and relevance

After 5 years from the end of the program implemented to reduce the consumption of potassium CS in our hospital, there has been a loss of adherence to the protocol that has led to a considerable increase in CS consumption, multiplying by 4 its use versus the recommended SP.

Therefore, it is necessary to spread the protocol for the use of intravenous potassium chloride, which must be maintained over time through annual audits and continuous dissemination sessions.