Oral Ammonium Chloride, Treatment in Severe Metabolic Alkalosis

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SUMMARY. Metabolic alkalosis is an irregular acid-balance characterized by an excess of bicarbonate with a normal or augmented pCO₂. The objective of this study was to elaborate an oral ammonium chloride (NH₄Cl) formulation and to evaluate its effectiveness and safety in a hospital setting. The Pharmacy Service conducted a bibliographic review. A standard operating procedure was established to elaborate the desired formula. Medical records of patients receiving NH₄Cl formula between January 2011 and January 2013 were reviewed retrospectively. A transparent solution was elaborated composed of 7 g of NH₄Cl, 30 mL of simple syrup and 70 mL of purified water. A dosage of 10 mL/day was administered once a day for 2 days in 6 patients and a reduction in pH by 0.09 points and bicarbonate for more than 8 mmol/L was achieved. No adverse effects were documented. Oral NH₄Cl seemed to be an effective therapeutic alternative in severe metabolic alkalosis.

KEY WORDS: Ammonium chloride, Drug safety, Metabolic alkalosis, Pharmaceutical preparations, Treatment effectiveness.

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