Kadar natrium serum dan standard base pasca rehidrasi dengan terapi standar atau ringer asetat malat pada anak dengan diare dehidrasi sedang = Blood sodium level and standard base after rehydration with standard tratment or ringer acetate malate in children with diarrhea moderate dehydration

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Abstrak

Hiponatremia merupakan salah satu komplikasi yang sering terjadi pada anak yang mendapat terapi cairan hipotonik. Hiponatremia sering ditemui pada diare dengan dehidrasi. Saat ini standar terapi diare dengan dehidrasi masih menggunakan cairan hipotonik.
Tujuan: Mengetahui perubahan kadar natrium darah dan standard base (SB) pasca rehidrasi menggunakan cairan standar atau cairan ringer asetat malat (RAM)
Metode: Penelitian uji klinis acak terkontrol membandingkan 2 macam terapi yaitu cairan standar dan cairan RAM, dilakukan di RSUD Dr. Soetomo Surabaya.
Hasil: Didapatkan 21 subyek di kelompok cairan standar dan 19 subyek di kelompok RAM. Rerata kadar natrium serum dan SB awal di kelompok cairan standar 140.95 mmol/L dan -10.57 mmol/L, pada kelompok terapi RAM adalah 141.40 mmol/L dan -9.37 mmol/L. Nilai tersebut tidak menunjukan perbedaan bermakna antara 2 kelompok. Pasca rehidrasi didapatkan kadar natrium 138.31 mmol/L dengan SB 6.32 mmol/L pada kelompok cairan standar dan pada kelompok RAM 141.74 mmol/L dan -7.37 mmol/L. Perubahan rerata kadar natrium menunjukkan perbedaan bermakna secara statistik, sedangkan perubahan SB tidak menunjukkan perbedaan yang bermakna. Rerata penurunan kadar natrium pada kelompok terapi standar adalah 2.48 mmol/L dan kenaikan 0.37 mmol/L pada kelompok RAM.
Simpulan Didapatkan perubahan kadar natrium darah dan SB pasca rehidrasi menggunakan 2 cairan berbeda.
<hr><i>Hyponatremia is a common complication in children receiving hypotonic fluid therapy. Hyponatremia is common in diarrhea with dehydration . The current standard treatment of diarrhea with dehydration still using hypotonic solutions.
Objective: To determine changes in blood sodium levels and standard base (SB) after rehydration using standard solutions or Ringer's acetate malate solutions (RAM)
Methods: The study was a randomized, controlled clinical trial comparing two kinds of therapy that is standard solutions and RAM solutions performed at Dr. Soetomo hospitals.
Results: There were 21 subjects in standard group and 19 subjects in groups of RAM group. The mean initial sodium level and SB in standard treatment were 140.95 mmol /L and -10.57 mmol/L, in the RAM treatment group was 141.40 mmol /L and -9.37 mmol/L. These values did not show significant differences between the 2 groups. Post rehydration sodium level was 138.31 mmol/L with SB was -6.32 mmol/L in the standard treatment group and in the group of RAM 141.74 mmol/L and -7.37 mmol/L. Changes in the mean sodium levels showed statistically significant differences, whereas SB changes showed no significant difference. The mean decrease in sodium levels in the standard therapy group was 2.48 mmol/L and the mean increase 0.37 mmol/L in the group of RAM.

Conclusions : There were changes in blood sodium levels and SB after rehydration using two different solutions.</i>