

RINGKASAN

Keberhasilan resusitasi cairan pada penderita syok hipovolemik secara umum diukur dari perbaikan parameter klinis, ditambah parameter asam basa dan kadar asam laktat diharapkan dapat lebih menggambarkan perbaikan perfusi jaringan pasca syok. Pada saat syok telah teratasi pasca resusitasi cairan, tetapi masih asidosis metabolik yang bersifat akut (*uncompensated*), apakah pemulihan pH darah pasca syok ini dapat dicapai hanya dengan mempertahankan perfusi yang efektif menggunakan cairan saja ataukah masih memerlukan pemberian NaHCO₃ sebagai terapi tambahan untuk mempercepat pemulihan pH darah?

Dilakukan pengukuran analisa gas darah dan kadar asam laktat di Ruang Resusitasi IRD Dr Soetomo Surabaya pada penderita syok hipovolemik pasca resusitasi. Penderita yang masih asidosis metabolik diberikan cairan Ringer Asetat (group 1) dan Ringer asetat ditambah Nabic (group 2) kemudian dilakukan pengukuran analisa gas darah dan laktat pada 15 menit dan 60 menit sesudahnya.

Hasil pengukuran pada waktu datang dan 15 menit pasca resusitasi didapatkan perubahan rerata awal kedua kelompok, pH (group I: 7.252 \pm 0.1 menjadi 7.261 \pm 0.1; group II: 7.224 \pm 0.1 menjadi 7.330 \pm 0.1); Sedangkan pada 60 menit (group I: 7.261 \pm 0.1 menjadi 7.263 \pm 0.1; group II: 7.330 \pm 0.1 menjadi 7.372 \pm 0.1);

Kesimpulan tidak ada perbedaan bermakna antara kedua kelompok ($p>0.05$) tetapi memang didapatkan rerata peningkatan yang lebih tinggi pada group II ($p<0.05$)

SUMMARY

BACKGROUND

The success in fluid resuscitation in patients with hypovolemic shock in general is measured by the clinical parameters like: blood pressure, pulse, perfusion and urine output. But these clinical parameters canot illustrate precisely where the perfusion recovery take place in the tissue which undergo vasoconstriction and hypoperfusion after resuscitation. Measurements of acid base parameter and lactic acid concentration are expected to give a better picture of the tissue perfusion recovery after shock. When hypovolemic shock is overcome after tissue perfusion recovery, but acute metabolic acidosis is still present (uncompensated), is it possible that blood pH recovery post shock can be obtained only by maintining effective perfusion using only fluid or giving sodium bicarbonate is still necessary as an additional therapy to accelerate pH recovery in blood?

METHODS

Blood gas analysis and measurement of lactic acid concentration are done from patients with hypovolemic shock after resuscitation at the resuscitation room in the IRD dr. Soetomo hospital in Surabaya.

Patients who are still undergoing metabolic acidosis are given Ringer Acetate (group I), and Ringer Acetate combined with Sodium Bicarbonate (group II), blood gas analysis and lactate acid measurement are done at 15 and 16 minutes afterwards.

RESULTS

Measurements at time of arrival and 15 minutes after resuscitation show average changes in both groups, pH (group I $7,252 \pm 0,1$ becomes $7,261 \pm 0,1$; group II $7,224 \pm 0,1$ becomes $7,330 \pm 0,1$). Meanwhile after 60 minutes pH (group I $7,261 \pm 0,1$ becomes $7,263 \pm 0,1$; group II $7,330 \pm 0,1$ becomes $7,372 \pm 0,1$).

CONCLUSION

There is no significant difference between the two groups ($p > 0,05$), but there is certainly an average increase in group II ($p < 0,05$)



ABSTRACT

The success in fluid resuscitation in patients with hypovolemic shock in general is measured by the clinical parameters plus acid base and lactic acid concentration measurements which expected to give a better picture of the tissue perfusion recovery after shock. When hypovolemic shock is overcome after tissue perfusion recovery, but acute metabolic acidosis is still present (uncompensated), is it possible that blood pH recovery post shock can be obtained only by maintaining effective perfusion using only fluid or giving sodium bicarbonate is still necessary as an additional therapy to accelerate pH recovery in blood?

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