

Protein and energy requirements in patients with severe head injury

Requerimientos calóricos y proteicos en pacientes con traumatismo encefalocraneano severo.

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The aim of the present study was to assess the effect of severe head injury over resting energy expenditure and nitrogen losses. Eight patients with severe head trauma (mean Glasgow scale of 4.9 ± 1.6), subjected to emergency craniotomy were studied; four patients had septic complications and none received steroids. Energy expenditure was measured using indirect calorimetry and nitrogen losses were assessed measuring 24 h urea nitrogen excretion on days 1, 4, 7 and 10 of the postoperative period. Twelve healthy males composed the control group. Measured energy expenditure in patients, evaluated in 22 occasions, was 35 ± 9.8 Kcal/kg/day or $145 \pm 41\%$ of the estimation according to Harris-Benedict equations, compared to 22.0 ± 4.6 Kcal/kg/day or $89.9 \pm 17.5\%$ in the control group ($p < 0.001$). 24 h urinary urea nitrogen excretion in patients was 18 ± 12 g/day (range 5.2-46.9) and the catabolic index was 7.4 ± 13.5 . It is concluded that, due to the great individual variability