

Indirect calorimetry and nitrogen balance in patients with elective craniotomy

Calorimetría indirecta y balance nitrogenado en pacientes con craneotomía electiva.

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The aim of this study was to assess resting energy expenditure and nitrogen excretion in patients with cranial injury. In 25 patients subjected to elective craniotomy and 23 healthy volunteers, energy expenditure was measured using indirect calorimetry and compared with estimations according to Harris-Benedict equations. During the second postoperative day, measured energy expenditure in patients was 100 +/- 19% (range 66-185) of estimation and 115 +/- 22% (range 76-159%) of measured values in control subjects. In sedated patients with flaccid muscular paralysis, measured energy expenditure was 82 +/- 12% of estimation and 94 +/- 15% of measured values in control subjects. Urinary urea nitrogen excretion in patients was 10.2 +/- 5.4 g/day and catabolic index was 6.8 +/- 5.1. Patients receiving corticoids had increased urinary urea nitrogen excretion and no differences in measured energy expenditure, compared to patients not receiving this medication. It is concluded that the great vari