

Abstract (anglický)

Comparison of 15 predictive equations, used for estimation of Resting energy expenditure (REE), versus experimental REE values, obtained using indirect calorimetry on a group of polytraumatic patients (n=30), spontaneously breathing (n=20) and ventilated (n=10), hospitalised on Intensive Care Unit, is presented. Calculation is based on measurement of physiological and functional parameters. Between both groups of patients, the highest level of concordance between experimental and calculated data was achieved using Mifflin's, Livingston-Kohlstadt's and Johnstone's equation. The smallest difference between predicted and measured value REE of spontaneously breathing patients was achieved using Bernstein's, Owen's and Johnstone-Ireton's equation and ventilated Bernstein's and Owen's equation. Using bioimpedance determination of excessive body water („overhydration“) and modification of body mass subtracting this amount, precision of REE prediction was increased. Application of correction factors did not extensively increase the concordance of data calculated.