

10 Abstract

For patients with lung cancer are characterized phenomena such as cancer cachexia and increased resting energy expenditure. This increased resting energy expenditure leads to weight loss. This study was focused on patients with advanced non-small cell lung cancer (stage III and IV) undergoing chemotherapy.

Resting energy expenditure was measured at three intervals by using indirect calorimetry in 10 patients (7 men, 3 women) with NSCLC undergoing chemotherapy (mean age $64,3 \text{ years} \pm 7,79 \text{ years}$) at a Department of Centre for Research and Development. Resting energy expenditure was measured before chemotherapy, during and after chemotherapy.

We observed increased resting energy expenditure in these patients both before chemotherapy alone, as well as throughout chemotherapy. During chemotherapy there was decrease in REE. The average value of REE in the first test (% of predicted of HB) was $116,6 \% \pm 15,95 \%$, in the second measurement was mean value $113,9 \% \pm 14,73 \%$ and for the third examination we noticed that the average value $106,5 \% \pm 12,66 \%$.

We can confirm that resting energy expenditure in patients with NSCLC is increased during chemotherapy slowly decreased.

Keywords: non-small cell lung cancer, resting energy expenditure, indirect calorimetry, Harris-Benedict equation