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**Measurements of swallowing pulmonary secretions in the stomach area through scintigraphy after ELTGOL**

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Hypersecretion is associated with decreases of pulmonary function and higher risks of hospitalization and death in patients with chronic obstruction pulmonary disease (COPD). Slow expiration with the glottis open in a lateral posture (ELTGOL) is a chest physiotherapy technique. The aim this study was to describe the effects of ELTGOL on the elimination of the bronchial mucus in patients with COPD through measurement of the amounts of pulmonary secretions swallowed. Five patients with COPD and daily excessive expectoration were evaluated in two different situations, control and intervention, in a randomized order, with an interval of a week between them. The patients inhaled 20 mCi of  $^{99m}\text{Tc}$ -DTPA and two static scintigraphy images were taken. The first image (IM1<sup>st</sup>) was obtained after the inhalation, the second (IM2<sup>sc</sup>) 20 minutes after the first. ELTGOL was carried out after IM1<sup>st</sup> in intervention stage. The amount of scintillation of the IM1<sup>st</sup> and IM2<sup>sc</sup> of the stomach area was assessed, since all the expectorated mucus was swallowed. The study was approved by the local ethics committee. The Wilcoxon test was used for data analysis with a significance level of  $\alpha < 0.05$ , as shown in Table 1.

Table 1. Amounts of Pulmonary Secretions Swallowed

Imagens	CONTROL	INTERVENTION	p
IM1st	12446,40 ± 4250,42	13825,20 ± 8058,44	0.686
IM2nd	10812,00 ± 3531,32	36762,20 ± 21982,89	0.043 *

\* Significant differences at  $p < 0.05$ . Our findings showed that after ELTGOL treatment, there was an increase of radio labelled particle deposition in the stomach area suggesting that ELTGOL enhanced the bronchial secretion removal in the patients studied.