A COMPARISON OF TWO METHODS FOR ASSESSMENT OF LUNG MECHANICAL PARAMETERS

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Abstract

Comparison tests of the added compliance method and the standard method for the assessment of mechanical parameters of respiratory system are presented in this paper. In the added compliance method, an additional external mechanical chamber as the added compliance is periodically connected to the respirator-lungs system, to determine the values of the mechanical parameters of the respiratory system. The software application for the system control and data acquisition is written in the LabView Environment. The results confirm that the added compliance method is sufficient to be used for the calculation of the total compliance of respiratory system during the artificial ventilation.

Keywords: mechanical parameters of respiratory system, total compliance, airway resistance, artificial ventilation