

Medicine beyond frontiers

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**Updated Pediatric Respiratory Care :
Pediatric Chest Physiotherapy : A Review**

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The benefit of chest physiotherapy was firstly described several decades ago. The basic therapeutic principles in pediatric chest physiotherapy are the same as those applied in adults. Although, the child's growth and development results in continuing changes in respiratory structure and function as well as the requirement for different applications of chest physiotherapy in each age group. This article reviews traditional chest physiotherapy, new techniques, indication and contraindication. In addition, it includes brief review of recent clinical trial related to pediatric chest physiotherapy. Cough and expectoration of mucus are the best known symptoms in patients with pulmonary diseases. The most applied intervention for these symptoms is the use of chest physiotherapy to increase bronchial transport and reduce retention of mucus in the airway. Chest PT has emerged as a standard treatment modality for young children. However, it does not improve pulmonary status in all pulmonary diseases such as pneumonia, acute bronchiolitis. Chest physiotherapy interventions can be evaluated by using different outcome variables, such as measurement of the amount of expectorated mucus, bronchial mucus measurement, pulmonary function, medication use, frequency of exacerbation, clinical scores or quality of life. The real benefit from chest physiotherapy however will be difficult to judge from current clinical trial. It is still hoped that the ongoing research will contribute to the expanding evidence base for chest physiotherapy intervention in pediatric respiratory disease.