

# Chronic Lung Disease in Premature Infants: Respiratory Assessment and Physical Therapy Intervention

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Chronic lung disease (CLD) is a common neonatal complication in premature infants. Longitudinal follow-up studies of premature infants with CLD showed that CLD has adverse impacts on their subsequent pulmonary function, growth and neurodevelopment. Medical professionals working on these infants need to be equipped with the knowledge of early respiratory assessment and intervention. This article is aimed at reviewing the literature of CLD that has focused on the definition, pathology, respiratory assessments and physical therapy interventions. Respiratory assessments include physical examination, pulmonary function assessments and clinical scoring systems for assessing severity of CLD. Physical therapy interventions mainly incorporate chest physical therapy (CPT) that consists of neurophysiological facilitation of respiration, bronchial hygiene and breathing exercise. Previous studies that examined the effects of CPT on premature infants have primarily focused on bronchial hygiene. Future study needs to establish safe, appropriate time and standardized procedure of CPT. More studies are also needed to examine the therapeutic effects of neurophysiological facilitation and breathing exercise on these children. (FJPT 2003;28(5):258-268)

**Key words:** Chronic lung disease, Prematurity, Pulmonary function assessment, Chest physical therapy

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