Sleep-disordered Breathing in Children with Duchenne Muscular Dystrophy

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Advances in Paediatric Polysomnography have led to increased recognition of sleep-disordered breathing in children suffering from Duchenne muscular dystrophy (DMD). Because of the unique physiological alterations during sleep, respiratory muscle dysfunction in DMD may be recognised during sleep early in the disease. Recognised patterns include: 1) hypoxaemia; 2) obstructive apnoea, central apnoea, and hypopnoea. These may have important contribution to development of progressive cardiorespiratory failure. Early diagnosis with nocturnal polysomnography is the most conclusive way to assess nocturnal respiratory insufficiency in DMD children. Potential use of non-invasive ventilatory support should be discussed with patient and caregivers early in the disease.


Key words: Duchenne muscular dystrophy; Sleep-disordered breathing; Polysomnography