Abstract from Current Literatures

Management of severe bronchiolitis: impact of NICE guidelines

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Objective: To understand the impact of the National Institute for Health and Care Excellence (NICE) bronchiolitis guidelines on the management of children referred to paediatric intensive care unit (PICU) with bronchiolitis.

Design and setting: Data were collected on all children referred to a regional PICU transport service with the clinical diagnosis of bronchiolitis during the winter prior to the NICE consultation period (2011–2012) and during the winter after publication (2015–2016). Management initiated by the referring hospital was assessed.

Results: There were 165 infants referred with bronchiolitis in epoch 1 and 187 in epoch 2. Nebuliser use increased from 28% in epoch 1 to 53% in epoch 2. Increased use of high-flow nasal cannula oxygen and reduction in continuous positive airway pressure use were observed. The use of antibiotics did not change between epochs.

Conclusion: The use of nebulised therapies has increased in the management of severe bronchiolitis despite national guidance to the contrary.

Musculoskeletal anomalies in children with Down syndrome: an observational study

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Background: Musculoskeletal complications of Down syndrome (DS) are common but infrequently

reported. The combination of ligamentous laxity and low muscle tone contributes to increased risk of a number of musculoskeletal disorders and a delay in acquisition of motor milestones. The primary aim of this study was to describe musculoskeletal anomalies reported in a national cohort of children with DS.

Methods: This was an observational study. Children with DS, aged 0–21 years, were invited to attend a musculoskeletal assessment clinic conducted by a paediatric physician. Relevant musculoskeletal history and clinical findings were documented.

Results: Over an 18-month period, 503 children with DS were examined (56% male). The median age was 8.1 years (0.6–19.2). Pes planus was almost universal, occurring in 91% of the cohort. A range of other musculoskeletal anomalies were observed, with inflammatory arthritis (7%) and scoliosis (4.8%) occurring most frequently after pes planus. Delay in ambulation was common; the median age to walk was 28 months (12–84).

Conclusion: Children with DS are at increased risk of a number of potentially debilitating musculoskeletal problems. These conditions can present in variable manners or be completely asymptomatic. Pes planus is common; therefore, early consideration of orthotics and lifelong appropriate supportive footwear should be considered. Delayed ambulation is frequently noted. A significant proportion of children with DS have arthritis; however, despite a high prevalence, it is often missed, leading to delayed diagnosis. An annual musculoskeletal assessment for all children with DS could potentially enable early detection of problems, allowing for timely multidisciplinary team intervention and better clinical outcomes.