



CrossMark

Highlights from this issue

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ADMISSIONS WITH BRONCHIOLITIS

Admissions with bronchiolitis during the 'season' are a considerable burden to the overall paediatric health care resource. Green and colleagues report on the changes in hospital admission rates over the last 50 years. This is by analysis of multiple different recording systems including Hospital Inpatient Enquiry (1968–85), Hospital Episode Statistics (1989–2011), Oxford Record Linkage Study (1963–2011) and Paediatric Intensive Care Audit Network (2003–12). The data shows a seven fold increase since bronchiolitis was given a separate discharge code in 1979 from 6.6 to 46.1 episodes per 1000 infants aged less than 1, whereas admissions to paediatric intensive care units (PICU) rose only a little (1.3 to 1.6 infants per 1000 infants aged less than 1 year; 2004–11). The variation in geographical admission rates was five-fold with risk factors for admission including young maternal age, low social class, low birth weight and maternal smoking. There are many potential factors that could at least partially explain this which are discussed in the paper including changes in how emergency care is delivered, changes in how the hospital admission criteria are recorded, lowered thresholds for admission, increase in accuracy of discharge diagnosis, increasing prevalence of risk factors including the improvements in survival of infants born preterm. Disease severity is probably less of a factor if admissions to PICU can be used as a proxy for that. The challenge is how to best impact on this and the paper includes a powerful argument for developing strategies for prevention through vaccination. The implications for health care delivery are discussed in the accompanying editorial—Stemming the tide of hospital admissions for bronchiolitis. *See pages 132 and 118*

RECENT ADVANCES IN RESPIRATORY MEDICINE

In an up to date and authoritative review, Turnbull and Balfour-Lynn discuss important advances in respiratory medicine over the last few years. The focus is mainly on common conditions with practical guidance and includes discussion of bronchopulmonary dysplasia, nebulised hypertonic saline for bronchiolitis, the changing epidemiology of childhood pneumonia, adenotonsillectomy for obstructive sleep apnoea, advances in the diagnostics of primary ciliary dyskinesia and childhood interstitial lung disease. There are useful updates on different aspects of asthma

management including the national review of asthma deaths, the updated asthma guidelines, the impact of bacteria on asthma development and exacerbations, the role of electronic monitor/reminders on adherence and control, the use of montelukast for preschool wheeze. The article is well put together and an excellent summary of what's new in respiratory paediatrics—Editor's choice this month. *See page 192*

ARE ALL CHILDREN WITH ADHD REFERRED?

Many children with ADHD do not access services although it is well known that treatment has a positive impact on outcome short and long term. Efron and colleagues investigate the prevalence, types and predictors of professional service use in families of children with attention deficit hyperactivity disorder. Children were identified by parent and teacher screening (Conners 3 ADHD index) followed by formal case confirmation using the appropriate diagnostic interview schedule (179 children, age 6 to 8 years). More than one third (37%) of children had not accessed professional service use in the previous 12 months. Predictors of service use were older child and the impact of the ADHD on the child (after controlling for confounders including type severity etc). In a condition where treatment is of benefit this suggests there is a need for health care professionals to consider the condition as a factor in children who present with symptoms of all types and to refer on for professional help if appropriate. It is an interesting and important paper that should impact on our practice. *See page 154*

TOUCH SCREEN TECHNOLOGY USAGE IN TODDLERS

Numerous touch screen technologies are available for children and toddlers and their use is endemic. There is however widespread anxiety about the potential harm of 'media' dependant on the duration of and specifics of the exposure. Ahearne and colleagues report the outcome of parental questionnaires (82) completed for children aged 12 months to 3 years examining access to touch screen technologies and ability to perform common forms of interaction with them. 71% of toddlers had access for a median of 15 minutes per day. 24 months was the median age that children could unlock the screen, swipe through multiple images and look for specific features. By 25 months

(median) toddlers could identify and use specific touch screen features. In summary therefore by age 2 years many toddlers have specific skills to interact with touch screen technology purposefully. This opens up potential for the use of such devices for both assessment and intervention and necessitates further research into risks and benefit of such early exposure—particularly considering whether the exposure is active (inter-active) or passive and the longer term outcomes in terms of health, well being and educational value. *See page 174*

BACTERAEIC URINARY TRACT INFECTION IN INFANTS LESS THAN 3 MONTHS

Bacteraemic urinary tract infection now represents the most common source of bacteraemia in young infants although the implications of this on treatment, including antibiotic duration is unclear. Schroeder and colleagues report on parenteral treatment, duration and relapses in infants <3 months with bacteraemic urinary tract infection (same pathogenic organism from blood and urine, retrospective cohort study, 11 centres, 251 infants). Mean (+/-sd) duration of antibiotics was 7.8 +/-4 days. There was considerable variation—partly centre specific (see figure 2 in the paper) with a two-fold variation in mean duration of treatment across the participating institutions; 5.5 to 12 days. Other factors that predicted a longer treatment course included male sex, clinical state, co morbidities, organism other than *Escherichia coli*, positive repeat culture during treatment course. No child in the study had a relapse/second infection within 30 days. The authors conclude that the duration of antibiotics is variable and only partially explained by clinical factors and that it may be shorter courses would be safe and effective for generally healthy infants with bacteraemic urinary tract infection who have recovered clinically. In a thought provoking accompanying editorial Andrew Riordan asks the question 5, 7, 10 or 14 days: appropriate treatment for bacteraemia or an example of antimicrobial bingo? He ends with the pragmatic recommendation... the duration of antibiotics could be guided by clinical features commonly used to decide whether patients can be switched to oral antibiotics; suitable oral agent, child tolerating oral feeds, afebrile for 24–48 hours, clinical improvement and reduced inflammatory markers. *See pages 125 and 117*