Highlights from this issue

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Anaphylaxis following immunisation

Anaphylaxis is a rare but serious complication of immunisation with only limited contemporaneous data on incidence. Erlewyn-Lajeunesse *et al* report on cases of suspected anaphylaxis as an adverse effect following immunisation reported through the British Paediatric Surveillance scheme. During the 13 month study period seven out of 15 children reported met the criteria for anaphylaxis, none following the routine infant and preschool immunisation programme despite 5.5 million primary schedule immunisations being given during this time period. This is an important and useful dataset further supporting the safety of childhood immunisation. This, and the importance of the BPSU data reporting system in getting such an impressive data set are discussed in the accompanying editorial. ***See pages 487 and 485***.

Hypernatraemia in hospitalised patients

Hypernatraemic dehydration is well recognised in breastfed infants although rarely seen outside the neonatal period. Forman *et al* report their experience over 10 years of children either admitted with (n=45, 64 episodes, 1 in 2288 admissions) or who developed hypernatraemia during their inpatient stay (n=177). Hypernatraemia is defined as plasma sodium ≥150 mmol/l. The commonest causes on admission were dehydration secondary to gastroenteritis/systemic infection, particularly in children with neurodisability. Important other potential diagnosis including salt poisoning are highlighted with the recommendation that recurrent presentations are investigated further by paired plasma and urine chemistry in the first instance. Excluded from the above dataset are the 1 in 245 infants who developed hypernatraemia in the neonatal period, 97% of whom were breast fed. ***See page 502***.

Impact of the BTS guidelines on the management of asthma

There are many National and International guidelines for the management of common (and rare) conditions in paediatric practice although little data on their practical application and impact. Elkout *et al* look at the impact of the BTS guidance on prescribing using primary care database data between 2001 and 2006. The BTS guidance first published in 1990 provide a clear and practical stepwise approach to prescribing based on asthma severity. The guidance has been regularly updated including children from 1993 and, because of concerns about safety, specific guidance regarding the dosing of inhaled steroids since 2003; reducing maximum standard and high dose prescribing from 800 mcg to 400 mcg and 2000 mcg to 800 mcg of beclomethasone proprionate. The dataset is of considerable interest. Between 7 and 8% of children were prescribed at least one asthma medication, usually short acting bronchodilators. This didn't change during the study period. The proportion of children receiving oral steroids (short courses) increased significantly from 6% to 16% which was felt to be in keeping with practice change rather than increased asthma severity. The proportion receiving inhaled corticosteroids at >400 mcg per day fell from 16.2% to 11.7% with an increased use of add on therapies such as long acting bronchodilators and leukotriene receptor antagonists particularly when higher does of inhaled corticosteroids were used. The authors acknowledge potential flaws in their dataset although state the general trend is encouraging with some suggestion that guidance is impacting on practice. ***See page 521***.

High quality training within the 48 h working week

The Temple report (2010) on the impact of the working time directive on training states that high quality training can be delivered in 48 h although this is dependent upon changes being made to the way both training and service are delivered so that every learning moment is made to count. The statement is challenging but becoming accepted with increasing emphasis on lifelong learning rather than just in the trainee years. Klaber and Roland explore the views of medical students, trainees and consultants on various recommendations made within the Temple report. All are stakeholders in work force planning. There is reasonable agreement with many of the statements regarding the need for changes in the workplace, particularly by the consultants questioned although only 5 out of 12 consultants surveyed agreed that extending the hours worked or the length of training was not a sustainable solution to training. The potential need to train for longer does need to be considered as part of the overall strategy to enhance the quality of training and achieve the competencies required for safe and sustainable practice at consultant level. ***See page 517***.

Antibiotic use in children

An interesting aspect of antibiotic prescribing in children is explored by de Jong *et al* utilising data from their National prescribing database. In The Netherlands 20–30% of children per year receive antibiotics, mainly for upper respiratory tract infections, which are often viral. Many factors will influence prescribing. In this dataset parents of children who receive antibiotics receive more medicines themselves including antibiotics, analgesics, non-steroidal anti-inflammatory drugs and psychotropic drugs. The presumption is that parenteral use of medications impacts on prescribing of medications for children and potentially illness behaviour. The finding is important and certainly warrants further exploration if we want to impact on the best and most appropriate use of antibiotics in children. ***See page 578***.

In *E&P* this month

The excellent series of interpretations continues with a useful update on the physiological background and practical applications and limitations of insulin-like growth factor 1 testing in clinical practice. The authors address specific clinical questions including the role in the assessment of short stature and in monitoring the child on growth hormone therapy. Similarly focused and practical is the 15 min consultation: structured approach to the management of facial paralysis which is in essence a state of the art update on how to best assess and manage this when seen in clinical practice and will be useful to me when I next see a case.