

A pair of important leading articles

Our leading article section, under the direction of Patrick Cartlidge, is meant to address important national and international clinical, health services, and policy issues. In this issue, two such articles appear. Drs. Mathews, Payne, Bonnet, and Chadwick, experts in child protection from Australia, Wales, France, and the US, discuss ways to ensure that British paediatricians participate in child abuse work. They cite one revealing statistic, the number of substantiated cases of abuse and neglect are significantly lower in England (3/1000) compared to Australia (7/1000), US (12/1000), and Canada (14/1000). They do not believe that these figures reflect less abuse, but rather represent the reluctance of paediatricians in England to engage in the business of child protection. They state unequivocally that the most effective way to change the climate that surrounds child protection in England is “enacting legislative immunity from legal and administrative proceedings where a report is made in good faith of suspected child abuse or neglect encountered in the course of the reporter’s work.” They discuss mandatory reporting laws in France, US and Canada that facilitate early discovery of cases of child abuse, but also “protect” the reporter. They believe that legal safeguards are imperative, stating: “Legislative provision of immunity from legal and administrative proceedings for reports made in good faith is an essential measure for creating the conditions under which such confidence can be restored.”

In the second leading article, John Henderson and colleagues from the University of Bristol, discuss the evolving science of asthma phenotypes. They cite evidence from three major research groups, Melbourne, Tucson and Bristol, which have used epidemiological data to define asthma phenotypes, that there maybe as many as five different patterns of wheeze and asthma: transient early wheeze, late-onset wheeze, persistent wheeze, intermediate-onset wheeze, and prolonged early wheeze. Do these phenotypes have therapeutic implications – from a clinical

standpoint that is the critical question – and as of yet, unanswered. In general, for children with significant wheeze, regardless of age, and whether it is intermittent or persistent, inhaled corticosteroids remain the mainstay of treatment. However, if and when we develop primary prevention strategies, than understanding phenotypes will become substantially more important.

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The effectiveness of BCG

BCG is known to prevent miliary and meningeal forms of tuberculosis. However, whether it protects against pulmonary disease is less certain. In a study from Cork, investigators assessed the protective effect of BCG in a group of 268 children in child care centres who had been exposed to two child care workers with TB. None of the 18 active cases of pulmonary TB were diagnosed in the 64 exposed children who had previously been vaccinated with BCG. The authors estimate a number needed to treat of 11.3. This is a wonderful example of intelligent investigators using an outbreak of disease to help answer a very important question.

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Extending the care of children with cystic fibrosis

The last two decades has seen a greater appreciation of the behavioural and developmental consequences of disease. The mental health needs of children and their parents are now seen as an important element of care. Ward *et al*, from Australia, describe many of the behavioural problems of preschool children with cystic fibrosis. In a study of 117 children they found that sleep problems, eating and adherence with physiotherapy were common problems. The parents reported high rates of depression, anxiety, and stress. Comprehensive care now includes attention to these issues, not only are they important to parents, but they also contribute to the health of children. **See page 341**

Antibiotic use in children

In a comprehensive review of antibiotic prescribing rates in the UK among children

0 to 18 years old between 1 January 1996 and 31 December 2006, Thompson and colleagues found that antibiotic prescribing declined by 24% between 1996 and 2000, but increased by 10% during the last three years of assessment. Because the IMS Health Mediplus UK database is comprehensive, they were able to link antibiotic prescriptions to the International Classification of Diseases. Although they found decreases for lower respiratory tract infections, tonsillitis and otitis media, they found an increase in prescribing for non-specific upper respiratory tract infections and abnormal signs and symptoms. They suggest that general practitioners may avoid using ICD codes for which formal guidelines suggest antibiotics are not indicated. Much of my early research was on antibiotic prescribing in children. There is a dynamic and complex interplay between physicians and parents when it comes to antibiotics. Antibiotic use in the US has declined following the introduction of both the H Influenzae and pneumococcal conjugate vaccines. Why? First, there is less disease. Second, parents are “pressuring” physicians less for antibiotics. Third, physicians are less concerned about missing the young infant with fever who may develop meningitis. Fourth, numerous guidelines now suggest that a wait and watch approach for children with otitis media is safe. **See page 337**

This month in *F&N*

- ▶ Rapid B-type natriuretic peptide (BNP) distinguishes between cardiac and respiratory disease. In a small, but important randomized clinical trial, J T Attridge *et al* found that BNP reduces the number of primary indomethacin doses necessary in premature infants with patent ductus arteriosus.
- ▶ An enlightening and complex study from the MOSAIC group examines survival in very preterm infants in 10 geographically defined European regions in 2003. For example, admission to NICU of infants born 24-27 weeks’ gestation varied between 67% and 98%. Since infant mortality rate is used by virtually every major world society as a measure of the quality of a health care system, standardising how we count fetal and neonatal deaths is critical.