

## The success of ALSPAC

For many years I have admired the success of ALSPAC. The fourth of the British birth cohort studies, this project began in 1990 and has continued to add to our scientific knowledge. More recently because the initial investigators were wise to obtain biological samples from its participants, the ALSPAC has begun to generate important data based upon genetic information. In this issue, Professor Jean Golding, at my urging, reflects on the many successes of ALSPAC. She has focused her review on 10 topics, ranging from the “puzzle of peanut allergy,” to a recent group of genetic studies. Along with the work of the British Paediatric Surveillance Unit, which has been mimicked all over the world, ALSPAC represents the best of child health research in the UK. As the US continues to struggle with the launch of the National Children’s Study (<http://www.nationalchildrensstudy.gov/Pages/default.aspx>), which will examine the effects of environmental influences on the health and development of 100,000 children, it has much to learn from the success of ALSPAC and the other birth cohort studies. *See page 319*

## The science of revalidation

Like many countries, the UK is struggling with how to determine if doctors who have been in practice for a number of years, remain fit to practice. Whatever the precise term, this process is distinctly different from the yearly requirement of most national medical societies that physicians acquire a certain number of “credits”. The periodic reassessment—revalidation in the UK—is likely to be a complicated process. In the US it has remained a paper and pencil test, although the goal is for this to change in the coming years. In the UK it is clear that revalidation will not be a simple multiple choice test but will involve evaluation of consultants by their peers, patients and supervisors. In three linked papers, a perspective by Diwakar and Skelton, and two original research reports by Howells and Archer, the issue of revalidation is discussed. In contemporary medicine evidence has become paramount. More educational research is needed to ensure that

the process of revalidation is evidence-based. *See pages 317, 323 and 330*

## Inhaled corticosteroids—the mainstay of treatment for children with asthma

A meta-analysis by Castro-Rodriguez and Rodrigo from Uruguay reinforces the recommendation by most professional and governmental agencies that children with asthma should receive inhaled corticosteroids. In a study that analysed the results from 18 reports, they found that children and adolescents with mild to moderate asthma treated with ICS compared to montelukast, had better physiologic and clinical outcomes. What of the child who has persistent symptoms related to asthma while on ICS—should the steroids be increased, or would other treatments be better? In a complicated double-blind triple-crossover clinical trial, 165 children (age range 6–17 years) with poorly controlled asthma, were randomised to receive each of three therapies for 16 weeks: a doubling of the fluticasone dose, low-dose fluticasone plus a long acting B-agonist (LABA), or low-dose fluticasone plus a leukotriene receptor antagonist (LTRA)<sup>1</sup>. Children did best—a composite score of change in forced expiratory volume in 1 second, use of oral steroids, and number of asthma-control days, with the addition of LABA (LABA vs. LTRA, 52% vs. 34%; LABA vs. ICS, 54% vs. 32%). Age did not affect response to therapy. Whites and Latinos were most likely to have a best response to add-on LABA and least likely to have a best response to step-up fluticasone. Black children were equally likely to have a best response to LABA and ICS and less likely to have a best response to LTRA. Unfortunately the US Food and Drug Administration recently warned clinicians that LABA are associated with severe asthma exacerbations and death. An accompanying editorial suggests that in children with poorly controlled asthma, either the dose of ICS should be increased or a LTRA started.<sup>2</sup> Regardless, careful follow-up and monitoring is necessary and if the child does not improve, then he should be switched to the other regimen. LABAs, at least in the US, are to be avoided. *See page 365*

## This month in *F&N*

- ▶ Martin Ward Platt reflects on two papers and comments on the continuing controversy about pain control in neonates. Strives have been made during the past two decades, but extensive variation remains in which intubated premature infants are sedated. However, a recent paper suggests that intubated adults who are not sedated do better than those who are sedated.<sup>3</sup> Many questions around pain control and sedation in neonates remain unanswered.
- ▶ The impact of genetics on health outcomes is once again highlighted in a paper that suggests that Asian and African-American very low birth weight infants have worse severe retinopathy of prematurity than white infants.
- ▶ A paper by McGuire and Clerihew—a comparison of before/after studies of the impact of fluticonazole prophylaxis compared with controlled trials—once again, highlights the importance of randomized clinical trials. The relative risks from before/after studies significantly and substantially overestimate the impact of fluconazole prophylaxis compared with RCTs.
- ▶ The power of regionalisation—using data from EPIPAGE and MOSAIC studies—Zeitlin *et al* from France once again detail the importance of regionalisation in the care of very premature infants. As regionalisation increased between 1998 and 2003, the rate of very preterm babies discharged alive increased by 18% and severe intraventricular haemorrhage decreased. For policy makers the message after two decades of studies from different countries is clear—the care of very premature infants should be regionalized.

## REFERENCES

1. Lemanske RF, Mauger DT, Sorkness CA, *et al*. Step-up therapy for children with uncontrolled asthma while receiving inhaled corticosteroids. *N Engl J Med* 2010;**362**:975–985.
2. von Mutius E and Drazen JM. Choosing asthma step-up care. *N Engl J Med* 2010;**362**:1042–1043.
3. Strøm T, Martinussen T, Toft P. A protocol of no sedation for critically ill patients receiving mechanical ventilation: A randomised trial. *Lancet* 2010;**375**:475–480.