

Highlights from this issue

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Two questions about empyema

Woolf Walker and colleagues from Southampton University Hospitals review the aetiology and treatment of childhood empyema. I find two issues particularly perplexing. Why has the incidence of empyema increased over the past decade? Numerous reports from the UK, USA and Europe suggest an increasing number of admissions related to empyema. Certainly diagnostic bias is playing a hand in these trends. We are more sensitive to respiratory distress in children, order more tests – ultrasound, CT, plain radiograph – and find more disease. Although this is likely part of the explanation, it certainly does not account for the dramatic increase. Given the increasing use of the conjugate pneumococcal vaccine, which reduces the incidence of childhood pneumonia, the increase in empyema is perplexing. Second, treatment remains uncertain. The role of thoracentesis and use of a fibrinolytic agent varies from institution to institution indeed treatment appears highly dependent upon the individuals involved. My infectious disease, pulmonary and surgical colleagues rarely ‘agree’ about the best course. Some advocate early drainage, with a chest tube left in, others drainage, but without a tube, while others still champion fibrinolytic agents. Clearly, the size of the empyema and how well the child is doing impacts on these decisions, but consensus is often difficult to reach. *See page 482.*

Audits

Quality improvement – often reported as audit in the UK – has become a central part of any modern healthcare system. Some quality experts have argued that if the care we delivered was consistent with high-quality recommendations, regardless of any new technological advances, not only could we reduce cost, but life expectancy and quality of life would improve. Others have suggested that quality improvement efforts could actually lead to higher costs. For example, if all individuals with signs of a stroke received the intensive, rapid care currently suggested, costs may go up, rather

than down, although most certainly quality of life would improve. We receive many reports of audits each year, but publish few. Our criteria – the audit must focus on a common, important and prevalent problem, and assess national rather than local trends. In this issue of the *ADC*, Palmer *et al*, describe the changes in autism spectrum disorder (ASD) diagnostic assessments as reported by 149 of 243 child development teams. The two obvious limitations, the use of self-report and a response rate of only 61%. The problem is very common – about 1 in 100 children are now diagnosed with ASD – and obviously important. They found substantial progress in some areas over the past 6 years – from 2001 to 2007. Multidisciplinary teams are now used by over 90% of child development teams, the use of written ASD assessment protocols has almost doubled (32–54%), and standardised diagnostic interviews are much more common (14–50%). Unfortunately a majority still have not agreed upon timetable for assessment (36%). Where to next? I suspect another assessment in 3–5 years. *See page 473.*

A negative RCT

Journals are often criticised because they tend not to publish randomised trials with negative results. In addition, we know authors are less likely to submit randomised controlled trials (RCTs) with negative findings. In a fascinating study from the Netherlands, Bakker and colleagues found that 91 children with debilitating fatigue shown a video on chronic fatigue syndrome and coping behaviour, actually had worse outcomes over the course of 12 months – an increase in school absence and development of persistent fatigue. The authors are to be congratulated for submitting their study for publication – I am sure the results are not what they expected. *See page 457.*

Minor head trauma in children – who needs to be scanned, who needs to be hospitalised

Minor head trauma in children is quite common. Many clinicians have grappled

with the decision to obtain a CT scan of the head in these children. For many years the inevitable answer has been yes, but with increasing concern about overuse of diagnostic tests and radiation exposure in children, a number of groups have tried to develop clinical decision rules for children with minor head injury. Alastair Pickering and colleagues from Sheffield reviewed the literature and found that only four rules have been tested in more than one cohort, and of that group, two rules, PECARN and CHALICE, appear to be the best. However, they conclude that the use of PECARN in the UK would result in ‘an unacceptably high rate of CT scans per injury’, and recommend continued use of CHALICE. Decisions like this are a reflection of societal risk – they believe that in the UK, families are willing to tolerate ‘missing’ a very small number of children with serious consequences of minor head injury, to prevent many more children undergoing neuroimaging. The same risk would not be tolerated in the US where clinical decisions consist of three intersecting factors: physician knowledge and experience; patient characteristics and values and the evidence. However, they are always made in the context of societal norms and in the USA we are risk adverse.¹ *See page 414.*

A novel use of HPV vaccine

We receive 200–300 case reports each year. We publish 10–12. Our primary criterion is therapeutic or diagnostic novelty, not description of rare associations in rare conditions. Although recurrent laryngeal papillomatosis is a rare condition, in the patient described, following attempts at surgical laser ablation, the papillomas returned, and genotyping subsequently demonstrated human papilloma virus (HPV) type 11. The patient was vaccinated with one of the HPV approved immunisations with anti-HPV-11 activity. Remission of her disease has continued during the 17-month follow-up period. *See page 476.*

REFERENCE

1. Bauchner H, Simpson L, Chessare J. Changing physician behaviour. *Arch Dis Child* 2001;**84**:459–62.