

Highlights from this issue

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Risk factors for childhood overweight identifiable during infancy

It is well known that overweight or obesity during childhood increase the risk of obesity in adults with long term implications for health. In this issue risk factors for childhood obesity identifiable during infancy are explored by a systematic review of the literature. Thirty studies were identified which fulfilled the criteria for inclusion and identified several factors—early rapid weight gain, high birth weight, maternal pre-pregnancy overweight and maternal smoking in pregnancy. Breast feeding and delayed introduction of solids were protective. No evidence was found for maternal age or education, maternal depression or infant ethnicity. Results on socioeconomic status were conflicting. These are important observations with the potential to impact; particularly relevant for paediatricians is the promotion of breast feeding and the avoidance of early rapid weight gain or at least the awareness that this will increase the risk of obesity longer term. *See page 1019.*

Cardiac disease in infants who present with apparent life threatening events

Apparent life threatening events (ALTE) are common and cause significant anxiety for the parent and clinician being characterised by some combination of apnoea, colour change, change in muscle tone, choking and gagging. The differential diagnosis is wide and a cause often not found with implications for the investigation and management. Hoki and colleagues review infants hospitalised between 1999 and 2003 with follow up data to 2009. Four hundred and eighty-five infants, mean age around 2 months, were admitted and 219 submitted to cardiac investigation. Of these only two had significant cardiac disease with a three further cases identified during follow up. These included cardiomyopathy, ventricular pre excitation (2), frequent ventricular ectopics and moderate aortic stenosis. The only risk factor (although the numbers were small) was prematurity. The authors conclude that cardiac testing done at the time of an ALTE has a low predictive value for diagnosing cardiac disease and this should impact on

our assessment and management of such infants. *See page 1034.*

Socioeconomic deprivation and Perthes' disease

Perthes' disease (idiopathic osteonecrosis of the juvenile hip) is a relatively common condition (1 in 850) which may precipitate early onset osteoarthritis. There is a strong link with social deprivation. In an interesting further exploration of this Perry and colleagues look at the influence of the urban/rural environment (also felt to be a factor) using data from the Scottish Morbidity Record. The association with socioeconomic deprivation was confirmed (most deprived quartile, twice the risk). Urban environment had a greater rate of disease than the rural environment although this reflected the higher deprivation index rather than the environment per se. Environment doesn't therefore appear to be an independent risk with socioeconomic deprivation confounding any observed effect. *See page 1053.*

Admissions with throat infections and tonsillectomy rates

Acute throat infections vary widely in severity from self limiting to serious infection. Tonsillectomy is indicated for recurrent or chronic tonsillitis, being of most benefit in the most severely affected. There has, year on year, been a fall in tonsillectomy rates in the UK over the last 10 years, although it remains one of the commonest operations performed. There has, during the same period, been a significant increase in the hospital admission rates for acute throat infections. Are the two related? Koshy and colleagues explore this by analysis of hospital in patient episode statistics. Although admissions have increased by 76% between 1999 and 2012, length of stay has declined with most patients being discharged soon after admission and there has been no increase in the numbers admitted with more severe infections (length of stay greater than 2 days) or peritonsillar abscess. This suggests that the decline in tonsillectomy rates has not been associated with an increase in the severity of throat infections. The increase in admissions with acute throat infection is likely to partially

reflect changes in primary care and hospital provision with some change in how patient episodes are classified as a consequence of the increase in provision of care through short stay assessment units. *See page 1064.*

Improved lung function with weight reduction in severe obesity

Obesity is associated with many different health problems in childhood and adolescence including reduced exercise tolerance as a consequence of breathlessness which can, incorrectly, be labelled as asthma. The impact of weight reduction on lung function and thereby respiratory health is explored in this issue. 112 children, mean age 14.4 years, weight SDS+3.38 were enrolled in a 26 week multidisciplinary programme to promote weight loss achieving a significant reduction in weight SDS and waist circumference. This was matched by a statistically significant improvement in lung function including functional vital capacity, forced expiratory volume, total lung capacity and expiratory reserve volume with the greatest improvement in expiratory reserve volume (15%) correlating with the reduction in SDS-BMI and waist circumference. The improved expiratory reserve volume could help children feel more comfortable doing exercise (less breathless) and this plus the improvement in self confidence with weight reduction further promote physical activity with continued improvement in BMI status and thereby general health. *See page 1039.*

In E&P this month

'Staring' episodes reflect a complex and challenging clinical problem. In an excellent review article Khan and colleagues explore the potential differential diagnosis which varies from day dreaming to complex partial seizures with a clear and pragmatic approach to assessment and management which readers will find useful when they see a case. The multifactorial aetiology, assessment and management of feeding disorders in cerebral palsy are covered in an similarly excellent review by Andrew and colleagues and includes a useful summary of the indications for and practical management of gastrostomy tube feeding.