Highlights from this issue

R Mark Beattie, Editor in Chief

BREAST FEEDING AND INTERGENERATIONAL SOCIAL MOBILITY

Breastfeeding is well known to confer long term health and cognitive benefits on the developing child. Sacker and colleagues investigate the association between breast feeding and intergenerational social mobility through secondary analysis of 1958 and 1970 British cohorts (both around 17 000 individuals). The main outcome measure was social class at 33/ 34 years adjusted for father's social class at age 10/11. In summary breast fed individuals were more likely to be upwardly mobile (1958 cohort OR 1.2, 95% CI 1.12 to 1.37) and less likely to be downwardly mobile (1958 cohort OR 0.81, 95% CI 0.73 to 0.90). Data from both cohorts were similar. In an ordinal regression model the effect was mediated, at least in part, by neurodevelopment (cognitive score) and emotional stress score. The concept and data are of considerable interest, provide further support for the long term benefits of breast feeding and are discussed an accompanying editorial— Breast feeding, causal effects and inequalities. See pages 666 and 654

EOSINOPHILIC OESOPHAGITIS

Eosinophilic oesophagitis is being seen with increased frequency, particularly in older children with atopic disease. Presentation is with dysphagia. Diagnosis is by endoscopy with upper, middle and lower oesophageal biopsy. Management strategies, not always effective, include dietary elimination and topical corticosteroids. In an excellent review John Fell discusses the clinical features, practicalities of diagnosis and difficulties with management emphasising the need for better diagnostic techniques and treatment strategies in this increasingly recognised and increasingly common condition. See page 702

INVESTIGATING MICROCEPHALY

Microcephaly is a clinical finding and not a disease and as such warrants careful assessment and appropriate investigation. Woods and colleagues provide a diagnostic structure to follow when the clinician is presented with a child with microcephaly. Definitions are discussed in detail with the authors proposing a diagnostic algorithm

for an occipital head circumference of less than -3SD below the mean for age and sex. The algorithm is separated into primary (detectable prior to 36 weeks gestation) and secondary (developing after birth) with differences in the investigative approach to each. Primary microcephaly is split into four categories including with dwarfism (symmetrical growth failure), with dysmorphic features and/or congenital abnormalities (referral to clinical genetchromosomes, microarray), additional clinical features (metabolic disorders, metabolic investigation), and autosomal recessive primary microcephaly phenotype. Secondary microcephaly is caused by anything that disrupts the orderly development and functioning of the central nervous system. The emphasis in terms of investigation is to distinguish whether the child has a static (chromosomal or single gene) or a progressive disorder (genetic, neurometabolic). The authors take the reader carefully through the background knowledge required to assess children with microcephaly and give clear guidance about who should be investigated further and when neuroradiology, genetic and metabolic testing is most likely to be helpful. See page 707

LONG TERM VENTILATION

There has been a rapid increase in paediatric long-term ventilation (LTV) over the last 20 years. McDougall and colleagues examine longitudinal trends in a single regional referral unit over 15 years. 144 children commenced LTV with increase in incidence over time and, over the whole period, ten fold increase in prevalence. The increase in prevalence was mainly due to a significant increase in the institution of non-invasive ventilation. Five year survival was 94% overall, significantly higher for patients on non-invasive ventilation. Ten year survival was 91%. Some children were able to discontinue respiratory support, 21% after five years and 42% after 10 years. 26% of the total cohort transitioned to adult services. Many of the cases were managed in the home setting. In summary the paediatric LTV population has expanded significantly over the last 15 years. This is relevant to the future planning of paediatric hospital and community services which must take into account the needs of this highly complex patient group. The management (and challenges of management) is discussed further in an editorial by Robert Graham. See pages 660 and 653

EDUCATING ADOLESCENTS ABOUT ALCOHOL

There is no doubt that alcohol consumption in young people is a major public health issue and that (along with all other professional groups) schools have a role in increasing health knowledge and promoting healthy behaviours that can reduce alcohol related risk. Hardoff and colleagues report their experience of an additional educational day to augment existing education programmes—lecture, film and scenario based including risks of alcohol on health, behaviour and behaviour towards others and meeting a young adult disabled following an alcohol related road traffic accident. The feedback was generally positive (quantitative and qualitative). 665 young people participated (age 16-17). Many felt that their knowledge base had increased and that the day had made them think further about alcohol related behaviour and would impact on their future behaviour. This sort of initiative is time consuming but clearly had a high degree of engagement and has a high potential benefit if it can influence at least some young people to reflect on and consider the potential impact on their health and behaviour of alcohol use longer term. See page 672

IN FNN THIS MONTH

Therapeutic hypothermia is now the standard of care for moderate to severe hypoxic ischaemic encephalopathy. The treatment is evolving rapidly and there are many other groups that could potentially benefit. Austin et al discuss specific clinical scenarios and practical management. Venkatesh et al discuss the difficult question of when to treat neonatal thrombocytopenia summarising the assessment and aetiology and risk/benefit associated with platelet transfusion. Other highlights include articles on neonatal hypernataemia; the definition of hypoglycaemia (Definition of neonatal hypoglycaemia: time for a rethink?); and screening preterm infants and infants at risk for cardiorespiratory instability in car seats prior to discharge.