

# Highlights from this issue

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# **NIGHT TO NIGHT VARIATION OF PULSE OXIMETRY IN CHILDREN WITH SLEEP DISORDERED BREATHING**

Sleep disordered breathing is common, particularly in Down syndrome. Overnight polysomnography is the gold standard to diagnose but is difficult to access routinely. Overnight pulse oximetry is recommended for screening although there is little data on how best to interpret the results. Burke et al report data on night to night variation using statistical measures of repeatability in 214 children referred to a sleep clinic who required overnight oximetry. 123/214 had three technically adequate nights oximetry. The following measures were madelength of adequate trace, basal SpO2, number of desaturations (>4% drop for >10s) per hour 'adjusted index' and time with SpO2 <90%. There was substantial night to night variation in all clinical groups. Intraclass correlation coefficient for adjusted index was 0.54 (95% confidence interval 0.2-0.81) among children with Down Syndrome and 0.88 (95% confidence interval 0.84-0.91) for other diagnosis. Many children with one normal night of oximetry (39 out of 84) went on to have abnormal oximetry on subsequent nights. This data has significant implications for the assessment of sleep disordered breathing with the challenge being if the test is negative shouldn't I just repeat it? There is an excellent accompanying editorial-the investigation of sleep disordered breathing: seeing through a glass, darkly? See pages 1095 and 1082

### ASSESSMENT AND TREATMENT OF EATING DISORDERS IN CHILDREN AND ADOLESCENTS

These are common and serious mental health disorders that impact on physical health, development, cognition and psychosocial function. They are characterised by disturbed eating behaviours associated with weight and shape or by disinterest in food, phobic avoidance or avoidance due to sensory aspects of food. Knowledge of the specific conditions is crucial for their prompt recognition and treatment. Rebecca Mairs and Dasha Nicholls discuss the key factors in the psychiatric assessment of four feeding or eating disorders -anorexia nervosa, avoidant restrictive food intake disorder, bulimia nervosa and binge eating disorder. These are all conditions likely to be seen in both a paediatric and a psychiatric setting. The authors emphasise the importance of a family focused, developmentally appropriate and

multidisciplinary approach to care. This is essential reading for clinicians who want to better assess and manage this vulnerable group of patients. See page 1168

# INTERVENTIONS FOR PAEDIATRIC SURGERY PATIENTS WITH COMORBID **AUTISTIC SPECTRUM DISORDER**

For any patient the pre theatre and theatre environment—new faces, sights, sounds, smells—can be overwhelming. This is a particular difficulty for children with autistic spectrum disorder who generally prefer 'sameness' and find changes in routine, environment and personnel particularly challenging. This presents a very practical problem in the per-operative setting particularly as paediatric surgery is mostly carried out in a high throughput day care setting. Koski et al review the limited literature (11 papers 1997–2016). There are key themes—increased attention to individual needs, rehearsal and other desensitisation efforts, departure from a sole focus on sedation or restraint of the combatative or uncooperative patient and engaging caregivers in tuning perioperative management to individual needs. There are a few reports of improved approaches resulting improved outcomes. The individualisation of care and communication with the caregivers is key. The evidence we have emphasises the need for practices to be in place involving experienced therapists to ensure that this vulnerable group of patients receive the best possible input during their patient journey when admitted to hospital. This is clearly an area which should be a priority for more research. There is an excellent accompanying editorial-helping children on the autism spectrum deal with hospital admissions—from Carol Povey from the National Autistic Society. She highlights the National Autistic Society public awareness campaign 'Too Much Information', which is to raise awareness of the fact that apparently challenging behaviours seen in autistic children may be a result of sensory overload rather than 'bad' behaviour (http://www.autism.org.uk). See pages 1090 and 1081

# ASSESSMENT AND MANAGEMENT OF SEVERELY OBESE CHILDREN AND **ADOLESCENTS**

Overweight and obesity represent a rapidly growing threat to the physical and psychological health of children with very significant implications for long term health. In the UK (2014/5) 21.9% of children were overweight (body mass index greater than the 85th centile) and 9.1% were obese (body mass index greater than the 95th centile). This increased to 33.2% and 19.1% by age 11 years. This article focuses on a subgroup within the obese group—children with a BMI >99th centile and how best to assess and manage. This represents 3% of children and adolescents in the UK many of whom have very significant complications hypertension, hyperinsulinism, hyeplipidaemia (20%). The authors discuss the scale of the problem (including definitions), risk factors, referral criteria, current services, appropriate screening (including prioritisation for screening for monogenic obesity), investigation and therapeutic interventions. The article has a very practical focus reviewing the evidence and providing practical guidance including a possible pathway by which to consider the investigation and management of children with obesity. See page 1161

## **INDICATIONS FOR GASTROINTESTINAL ENDOSCOPY IN CHILDHOOD**

There have been many advances in the last 20 years. Gastrointestinal endoscopy (gastroscopy and ileocolonoscopy, diagnostic and therapeutic) is now widely available in paediatric gastroenterology units to children and young people of all ages and plays a central role in the diagnosis and management of common disorders including Coeliac disease, oesophageal reflux disease, eosinophilic oesophagitis and inflammatory bowel disease. Therapeutic endoscopic approaches are increasingly used. Newer technologies such as wireless capsule endoscopy and enteroscopy have enabled examination of previously inaccessible areas.

Belsha et al summarise current practice, review the role of endoscopy in assessment and management of specific conditions and provide guidance for when endoscopy might be considered in the work up of patients who present with common gastrointestinal symptoms such as abdominal pain, vomiting, chronic diarrhoea and gastrointestinal blood loss. This helpful overview should help clinicians in practice who will usually need to consider referral to a paediatric gastroenterology unit if they feel endoscopy is indicated. See page 1153