Atoms

Nick Brown , *Editor in Chief*

THE LAST CONSUMPTIVE

History is literally littered with examples of interventions which enjoyed a Warholian 15 min in the limelight. Without these ideas being aired though, there would have been no progression, no evolution of thinking. They should, therefore, be celebrated as milestones not derided as ideas barely worthy of the papyrus on which they were hatched. A century ago, with streptomycin still a generation away, only the most privileged would have been afforded the luxury of a sanitorium or better still an isolated alpine resort. In these settings, Lac Geneve shimmering in the background, the stubborn mycobacteria resistant to the usual liberal postural drainage manoeuvres and the plombage balls[1] the more gung-ho thoracic surgeons advocated could be overcome or so it was believed. And belief in a treatment is after all, great fuel

BILIARY ATRESIA

It's standard exam fare: early detection of biliary atresia predicts cirrhosis- and transplant-free survival. Though a 'cut-off 60 days' is the aspirational threshold, the reality (as most things in life) is less dichotomised: in short, the earlier the better. Somehow, though, many children still slip through a routine surveillance net which arguably has too many holes. Biliary atresia is as common as several of the current blood spot detectable inborn errors and the implications of early detection so great that we have a responsibility to follow this through. The immunosuppressed 2-year-old you are about to see with a lobe of parental liver would, I've no doubt, agree. The systematic review and meta-analysis by Adam Arshad and colleagues of the validity of the current, diverse potential screening techniques moves us forward from the tired time-honoured approach now thankfully freed from the meaningless bag urines of the past. We've published before on stool colour charts (perhaps the most intuitive) but, an additional 5 (stool colour saturation; urinary sulphated bile acid; bile acid blood spots; conjugated bilirubin measurement and blood carnitine) were put under the synthesis microscope. *See page 468*

HIGH FLOW HUMIDIFIED SUPPORT

There's an interesting, common trajectory to new treatments, gadgets and devices. Stage 1, the excitement and proselytising; stage 2, the niggles of doubt insufficient in themselves to bubble to the surface and stage 3, the RCT evidence of little, none or we must face it sometimes, negative effect. High flow humidified oxygen treatment (HF) had a giddy delivery. Within what felt like weeks, no institution worth its salt lacked the prerequisite circuitry. Then, slowly, the data began to trickle in. Louise Kooiman in Zvolle, the Netherlands and colleagues randomised children admitted with moderate bronchiolitis to HF or standard nasal cannulae and found no evidence of a difference in a modified PEWS score at 24 hours. A single RCT will rarely alone change practice, but given the now consistent inter-trial findings, it feels like time to reflect. *See page 455*

GLOBAL HEALTH: SICKLE CELL

There's a good case for arguing that Sickle Cell Disease fits the criteria for a neglected tropical disease: burden (individual medical and economic) huge; investment in drug development small. Emmanuel Modebe Iheanyi and Ituku Ozalla estimate the prevalence of conditional cerebral artery velocities (the zone where stroke becomes a potential if not high risk) by ultrasound assessment of mean and peak internal carotid and middle cerebral artery velocities, around 15% fulfilling their criteria. Apart from the very large burden in Sub-Saharan Africa (Nigeria has the world's highest number of children with SCD), there's some light at the end of the intervention tunnel. Exchange transfusion and hydroxycarbamide prophylaxis have major logistical and clinical downsides and are only used for the overt high velocity group. but the recent work on omega fatty acids and potassium thiocyanate means there might be more palatable and effective options in the near pipeline for those whose stenoses might progress. *See page 440*

TRISOMY– PROGNOSIS

Standard textbooks (in their various guises) tell us that trisomies 13 and 18 have a near universally poor prognosis. There is the occasional anecdote of a child celebrating a first birthday, but these are the rare exception. This perception might no longer be valid. Svetlana Glinianaia, at Newcastle University and colleagues from 13 pan-European regions in the EUROCAT registry interrogate their congenital anomaly data and link it to national mortality databases, synthesise the information and compare to recent work from Canada. The studies are concordant: despite a very high neonatal mortality (survival in trisomy 13 at 34% and in trisomy 18 at 38%), the conditional survival beyond this point was 32% and 21% respectively at 10 years – yes, 10 years. This is important information both from a counselling point of view and, pragmatically, from an intervention viewpoint. In Japan, there is already substantial experience of surgical intervention and (in many countries) intensive care. The role of cardiac surgery is still being debated: these data reinforce why this needs to remain firmly on the table. *See page 461*

Department of Women's and Children's Health, International Maternal and Child Health (IMCH), Uppsala University, Uppsala, Sweden; Department of Paediatrics, Länssjukhuset Gävle-Sandviken, Gävle, Sweden; Department of Child Health, Aga Khan University, Karachi, Pakistan

Correspondence to Dr Nick Brown, Department of Women's and Children's Health, International Maternal and Child Health (IMCH), Uppsala University, Uppsala, 75237, Sweden; nickjwbrown@gmail.com

ORCID iD

Nick Brown http://orcid.org/0000-0003-1789-0436

REFERENCE

1 Brantigan OC, Rigdon HL. Extrapleural pneumonolysis with lucite ball plombage. *Dis Chest* 1950;18:277–90.