

Highlights from this issue

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DON'T SHAKE IT ALL ABOUT

Airway clearance techniques in cystic fibrosis are probably regarded by patients with as much enthusiasm as children contemplate a plate of brussels sprouts. High frequency, external chest wall oscillation looked like the perfect answer—wrap yourself up in a vest or jacket, plug in and switch on, it vibrates away while you watch TV or whatever, and then some minutes later, all done! However, no gain without pain, and this pain-free (but very expensive) physiotherapy technique in fact turns out to be inferior to the bump and grind positive pressure device mask. McIlwaine *et al* (see page 746, *Editors' choice*) recruited over 100 CF patients to a year-long randomised controlled trial of oscillation versus positive pressure mask (the latter >200-fold cheaper), and showed that there were fewer CF lung attacks and a longer time to first attack in those using the positive pressure mask. Congratulations to the investigators on improving the evidence free land of chest physiotherapy, and for showing clear benefit of one technique over another for a highly clinically relevant end-point. As Eleanor Main points out (see page 701), had they used FEV₁ as an endpoint, the dreary conclusion would have been that everyone wins a prize and everything works equally well. Trebles, and reduce CF lung attacks and fiscal costs, all round!

P38 KINASE INHIBITION IN COPD—WHY IS MORE NOT BETTER?

Inhibition of the p38 mitogen activated protein kinase (MAPK) signalling pathway looks like a promising approach to the treatment of COPD as the pathway is abnormally activated in the airways of patients with COPD, it promotes inflammation in response to extracellular stimuli that are relevant to COPD, and it is not responsive to corticosteroids (sorry, could not find anything witty to say about this truly riveting pathway!). MacNee *et al* (see page 738) report interesting but preliminary findings with an orally active inhibitor PH-797804. Treatment with 6 mg daily increased FEV₁ and reduced rescue bronchodilator use markers of systemic inflammation and dyspnoea. Unexpectedly, the 10 mg daily dose was less effective. Dave Singh (see page 705)

speculates that this loss of effectiveness might reflect redundancy of MAPKs and that activation of other MAPKs occurs when the p38 pathway is profoundly inhibited. Such redundancy has been documented in other inflammatory diseases and has been seen as an important limitation. Is the catchily-named PH-797804 the answer to a patient's prayer (and if so, which COPD patients?) or merely another expensive way of swelling the coffers of Pharma by peddling an expensive, pan-panacea to all comers? More work needed, watch this space.

THE EARLY WORM GETS THE BIRD

So this is preterm delivery and its consequences. Early birth has long-term consequences, summarised in two manuscripts in this issue. In a meta-analysis, Kotecha *et al* (see page 760, *Hot topic*) show that, although successive cohorts are graduating from the neonatal unit with better lung function (all the hard work of insomniac neonatologists paying off!), actually even those who did not get BPD had long term impairment of spirometry. Vollsæter *et al* followed cohorts into adult life and demonstrated tracking of lung function in both preterm and term-born children (see page 767). Bolton and Bush synthesise recent evidence for and against catch-up growth after pre-term birth, suggesting that things may not be quite as dark as once we thought (see page 707), but nonetheless add to the crescendo of warnings that preterm survivors are a group that adult physicians need to start to understand. So let's ensure the early worm gets neither the bird nor unnecessary asthma and COPD treatments, but that evidence based assessment and treatment protocols are developed for this increasingly large group of patients.

ASTHMA IN PREGNANCY

Asthma is one of commonest chronic medical problems encountered in pregnancy. Management is not easy as pregnancy can have an unpredictable effect on asthma control and control can be difficult to assess as symptoms can be due to the physiological cardiorespiratory consequences of later pregnancy. Also, patients are reluctant to take regular controller therapy despite evidence that good asthma control throughout pregnancy improves perinatal outcomes. The available evidence on the safety of regular controller therapy is reassuring but few studies have assessed the safety of long acting beta agonists. Cossette *et al* (see page 724) do this comprehensively, using a large database of 7376 pregnancies in Quebec from 1998–2008. The rates of low birth weight, prematurity and small for gestational age were not greatly different in the 8.8% of women taking long acting beta agonists or in the larger population taking moderate doses of inhaled steroids. If anything, the trend was for better outcomes. Higher dose inhaled steroids were associated with a higher incidence of adverse pregnancy outcomes perhaps reflecting residual confounding due to uncontrolled or more severe asthma, or smoking status. Keep taking the inhalers!

CRUNCH TIME

This CT is from one of three cases from the battlefields of Afghanistan (*Pulmonary puzzles*, see page 794). Unusual noises were auscultated over the chest—what were they and whose eponymous name has been applied. Clue for scholars of the history of interstitial lung disease: it's not Rich!

