

Highlights from this issue

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Pre-word: you could not make it up!

The last issue of *Thorax* was tobacco themed, including three papers and an editorial about how exposure to smoking behaviour in films impacts adolescent smoking behaviour. Quoted in the *Independent*, a Department of Culture, Sports and Media SMOKESman said "The government believes that the current arrangements provide sufficient control on the depiction of smoking in films and a total ban would be a disproportionate interference. This action would undermine the credibility, and therefore the quality, of domestically produced films". So children being lured into smoking are of lesser importance, and belief based government replaces evidence based (if it ever existed). So that's all right then.

A hole in the throat—a paradigm shift

Once upon a time, patients with neuromuscular disease usually died of untreated respiratory failure. It was controversial when nasal mask ventilation was offered to teenagers with Duchenne muscular dystrophy (DMD). However, it was soon appreciated that quality of life improved, and prolonged survival was common. Patients reported quality of life similar to COPD, rightly rejecting the ability of the non-disabled to pontificate on this issue. The next hurdle is tracheostomy, traditionally shunned in end-stage neuromuscular disease. Sancho *et al* report their experience with tracheostomy in patients with amyotrophic lateral sclerosis. One year survival was nearly 80%. Worryingly, 6/38 were hospitalised for psychiatric reasons, and quality of life assessments are urgently needed. In an accompanying editorial, Shneerson calls for careful assessment and joint decision making, and clearly the days of paternalism are long past—these patients have to be fully informed of all possible options, and be part of open discussions about all of them. Perhaps we should learn from the Danish DMD program: most tracheostomies are performed electively (compared with 17/38

amyotrophic lateral sclerosis patients in the present study), and the patient controls an automatically allocated budget for equipment and carers, and appoints the carers himself. Few who recently saw a picture of a Danish tracheostomised DMD patient bungee jumping would doubt that quality of life is good. Times and paradigms are changing! *See pages 932 and 948.*

Action plans and COPD lung attacks

Action plans are an established and important component of management of asthma. Studies have shown that recurrent attacks are reduced by about 60% in patients who own and follow an action plan. One might assume that the same benefits would be seen in patients with COPD but a number of studies, including one in this issue of *Thorax* (*see page 977*), have shown a very limited impact of an action plan on the risk of recurrent attacks or on healthcare expenditure (a key outcome measure in the current climate). Whether this reflects differences in the underlying responsiveness of the attack to intervention or differences in patient characteristics is far from clear. Mike Morgan suggests that there may be lessons to learn from the more successful management pathways developed for other chronic diseases (*see page 935*). Perhaps guided self management would be more successful if it was applied as part of a multi-faceted, effectively integrated pathway of care. One key characteristic of such a pathway might be ready access to a trained healthcare professional. Primary care commissioners are rightly concerned by the high cost of COPD lung attacks and the high risk of recurrent episodes. This remains an important area for further study.

The more the merrier?

We all learnt as students that giving patients with COPD shedloads of oxygen is a bad thing because they forget to breathe and die, but for acute asthma, anything goes, because their respiratory drive is impervious to hyperoxia. Except it

isn't. In this issue, Perrin *et al* report that high concentration oxygen administered to patients with acute severe asthma may result in clinically significant hypercapnia (rise to ≥ 45 mm Hg or by ≥ 10 mm Hg), presumably but not definitely by worsening of V:Q mismatch to increase dead space ventilation. The accompanying Editorial points out that the time has come for guidelines for acute severe asthma to be changed, and in accord with the BTS oxygen guidelines, titrate oxygen as with any other drug to produce the desired effects, but no more. So the greater the certainty and seniority of the person teaching you, the more likely they are to be wrong—trainees please note. Moderation in all things (or at least in oxygen therapy). *See pages 937 and 931.*

Non-eosinophilic asthma and systemic inflammation

We have made our views on the value of the term 'asthma' very clear in previous editions of airwaves. As is the case for 'chronic renal failure' and 'heart failure', identification of this syndrome should be seen as the beginning of a search for underlying mechanisms rather than an end of the diagnostic process. One important component is to establish the pattern of the underlying airway inflammation. Studies which have done this in a systematic way have found that up to a third of patients have neutrophilic rather than eosinophilic airway inflammation. Identification of this sub-group is potentially clinically important as they respond poorly to corticosteroid therapy. Peter Gibson's group have made an important contribution to our understanding of non-eosinophilic asthma. In this issue of *Thorax* his group show that patients with neutrophilic asthma have increased systemic gene expression of various markers of neutrophilic inflammation, reinforcing the belief that their 'asthma' is associated with a fundamentally different pathological process (*see page 942*). Important questions on this asthma phenotype remain, including the stability of the phenotype in adults and children, the prognosis, and optimum management.