Highlights from this issue

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Andrew Bush and Ian Pavord, Editors

Easy-peasy, TB squeezy

The appropriate treatment of TB was sorted out long before the phrase 'evidence-based medicine' was hijacked and parroted by the chattering classes of modern day medicine, using it as a spinal reflex rather than risk any original thinking. The number of medications, doses and duration of therapy were established by a series of great randomised controlled trials. So the captain of the men of death is about to be consigned with a whimper to history, right? Wrong-MDR-TB has been followed by XDR-TB and now, as unsurprisingly as night following day, totally drug-resistant TB (TDR-TB). In Hot off the Breath this month, Zarir Udwadia (see page 286) analyses how we have snatched disaster from the very jaws of triumph, highlighting failures in the public and private services, which extend far beyond India. TDR-TB has the potential to be a world problem, sending us back into the dark ages of sanatorium care unless action is taken. The price of liberty may be eternal vigilance, but the price of halting a pandemic of resistant TB may be loss of liberty—loss of liberty for anyone who wants to prescribe anti-tuberculous chemotherapy irrespective of training (just as a certain amount of training is mandated before doing bypass surgery!) and an urgent endeavour to ensure that established resistant TB cases are treated promptly by experts. In these days of international travel, there is no reason to think that TDR-TB will remain confined to resource poor areas.

CT and ye will find: but what? (Hot topic)

Lung cancer screening is the hottest of hot topics. The American National Lung Cancer Screening Trial (NLST) found a 20% reduction in lung cancer mortality and a 6.7% reduction in total mortality in the 26722 patients randomised to CT screening compared to the 26732 who had CXR screening. Enthusiasm for screening

should be tempered by the high rate of false positive findings on CT and the very high cost per QALY, likely to be significantly higher than the cost of colon and breast cancer screening, even if the intervention is combined with an effective smoking cessation programme. Further cause for caution is the findings of the Danish Lung Cancer Screening Trial (see page 296). This much smaller study showed that annual CT screening for 5 years did not appear to reduce the proportion of patients with late stage disease (evidence of stage shift) or reduce mortality. The results are preliminary (arguably too preliminary) but the findings are of some concern. We agree with Stephen Spiro that much more detailed and long-term analysis of the findings of all currently ongoing screening trials and particular scrutiny of the findings in high risk groups is needed before we can make sense of this contentious area.

Cutting lungs down to size

Interventional bronchoscopists had high hopes that endoscopic lung volume reduction therapy using endobronchial valves would turn out to be an effective and safe treatment for emphysema. In reality the results of this procedure have been disappointing. One problem has been that a reduction in lung hyperinflation is not achieved consistently because of the presence of collateral ventilation in some treated areas. Could lung volume reduction using a locally injected polymer sealant be more effective because it is less affected by collateral ventilation? The answer is a cautious yes. Helgo Magnussen and colleagues (see page 302) looked at the results of three open label trials of showed that injection of the sealant was associated with reduced hyperinflation independent of fissure integrity assessed by CT. Shah and Geddes (see page 285) suggest that bronchoscopic lung volume reduction is considered in patients who are symptomatic despite maximum medical therapy and have

a residual volume >180% predicted. They recommend that valves are the first treatment option if fissure integrity is intact as they can be removed; if not, polymer sealant might be a better option.

Pre-drainage tension

In an entertaining series of letters, Simpson (see page 355) argues that traditional views on the pathogenesis of a tension pneumothorax are nonsense. He maintains that there has not been a convincing report of morbidity as a result of supra-atmospheric pleural pressure or an adequate explanation as to how this might occur in a patient breathing at atmospheric pressure. This view is not accepted by all (see page 356). Leigh-Smith and colleagues suggest that the term 'a pneumothorax that results in significant respiratory or haemodynamic compromise that reverses on thoracic decompression' is a more accurate representation. By the time all this has been written in the notes, the patient will probably be dead. There is also high potential for horrible acronyms. Simpson thinks the term 'tension pneumothorax' at least has the merit of provoking the appropriate reaction in the attending clinician. Challenges for our readers: can you provide us with compelling evidence of a tension pneumothorax and a believable explanation for the pathogenesis; and can you think of a better term for tension pneumothorax? A special prize (following) for the most ridiculous acronym.

One picture is worth a thousand pounds...

Or a prize of comparable value, such as dinner for two with Professor Pavord in McDonald's, going Dutch. This issue's striking cover picture was submitted by Andrea Collins, an SpR from Liverpool. Anyone out there got a figure for consideration as a cover picture or to be used as a medical mystery quiz? Usual copyright and patient consent rules apply.