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HIGHLIGHTS OF THORAX AT THE BRITISH THORACIC SOCIETY WINTER MEETING

In this edition of the journal, we publish four papers that are being presented at a special session of the BTS winter meeting, highlighting the excellence of the work published in *Thorax*. These papers cover tuberculosis, chronic obstructive pulmonary disease and interstitial lung disease, with both basic science and clinical research represented. In this month's airwaves we give you a taster of this session and much, much more...

"...YOUTH GROWS PALE, AND SPECTRE-THIN, AND DIES..."

So wrote John Keats in 1819, describing the effects of tuberculosis. He himself died of TB a year later, in Rome, at the age of only 25. His words come from the era before anti tuberculous chemotherapy, when it is estimated that TB was responsible for 20% of all deaths in London. The era of effective TB treatment began in 1948, with the report in our sister journal (the BMJ) of the first randomised controlled trial of TB treatment – MRC trial of streptomycin. In the 21st century, for many individuals, there is again no effective TB therapy because they are afflicted with multi drug resistant (MDR) TB. In this edition of *Thorax*, Daniel Meressa and colleagues describe an effective programme against MDR TB that has been implemented in Ethiopia (*see page 1181*, Editors' choice). Around 65% of patients in this programme were cured – the highest MDR TB treatment success rate so far achieved in Africa. The intervention included a standard second line drug regimen (for 18 months after bacteriological conversation); antiretroviral therapy for HIV infected individuals; financial support and a monthly food basket. This study demonstrates, once again, the importance of addressing poor nutrition and social deprivation in TB management, in addition to pharmacological treatment.

COPD AND THE ART OF AUGURY...

When the emperor Claudius invaded Britain in AD 43, he predicted his

chances of success in battle by watching how the sacred chickens consumed a ceremonial meal. Nowadays we have more sophisticated ways of predicting outcome. In patients with an exacerbation of COPD, there is a delicate balance between respiratory muscle load and respiratory muscle capacity that is termed neural respiratory drive. In this edition of the journal, Eui-Sik Suh and colleagues describe how the change in neural respiratory drive, seen during treatment for an exacerbation of COPD, can be measured objectively using electromyography of the parasternal muscles in the second intercostal space (*see page 1123*). Indeed the normalised change in this measurement, between admission and discharge, predicts safe discharge.

Claudius was a frail (though highly effective) emperor and frailty also has value in predicting COPD readmissions. In another "highlights of *Thorax*" article, published this month, Samantha Kon and colleagues describe the four-metre gait speed test in patients with an exacerbation of COPD (*see page 1131*). The difference between the fastest and slowest quartiles of 4MGS test corresponded with a seven-fold increase in the risk of readmission.

Where patients are readmitted to hospital within 30 days, NHS England imposes a hefty financial penalty. Whilst this is less than the tribute exacted from the defeated Britons by the victorious Claudius, it is still a significant financial pressure on hospital trusts. Predicting which patients are ready to go home and who are unlikely to require readmission soon, is therefore good for the patient and good for the bottom line.

ENIGMA

Sphingosine-1-phosphate has been described as "an enigmatic signalling lipid" and indeed the name derives from the enigmatic sphinx of Greek mythology. This signal molecule inhibits apoptosis and is implicated in idiopathic pulmonary fibrosis. It is irreversibly degraded by Sphingosine-1-phosphate lyase (S1PL). In the forth of our "highlights of *Thorax*" articles, Long

Shuang Huang and colleagues describe how S1PL can give us new insights into the mechanisms of idiopathic pulmonary fibrosis (*see page 1138*). In both mice and humans a lower level of S1PL is associated with greater pulmonary fibrosis and reduced survival. It may be that the enigma of the sphinx is a therapeutic target...

PREVENTING THE WORLD'S BIGGEST CHILD KILLER

Pneumonia is still the world's single biggest killer of children. The WHO and UNICEF have developed a Global Action Plan for Prevention and Control of Pneumonia which takes a three pronged approach: creating a safe environment; prevention and effective treatment. On *page 1149* of the journal, Shabir Madhi and colleagues focus on the second of these priorities – prevention, using the conjugate pneumococcal vaccine. They describe vaccine efficacy for conjugate vaccine (administered at 6, 14 and 39 weeks) in three public hospitals in South Africa. Vaccine efficacy (compared to hospital controls) increases with age and is around 20% at ≥ 8 weeks compared to almost 40% at 16–103 weeks. The authors propose a schedule of 2 early doses plus a booster dose (2+1 schedule) for similar African countries.

"IT'S TORSION JIM BUT NOT AS WE KNOW IT..."

Sharpen your diagnostic skills with our *Images in Thorax* on *page 1209*. Gilberto Szarf and colleagues describe a form of torsion that is of interest to the thoracic rather than the general surgeon. The condition is rare and often diagnosed late.