

# Respiratory symposium

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*ST17 in Respiratory Medicine, South East Scotland Deanery*

*The Respiratory symposium was held on 12 March 2015 at the Royal College of Physicians of Edinburgh*

**DECLARATION OF INTERESTS** No conflict of interests declared.

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This year's symposium began with a thought-provoking exploration of the challenges facing acute medical admissions, aptly followed by a session on the domiciliary care of a variety of common respiratory presentations. We were then taken through the latest developments in the treatment of chronic obstructive pulmonary disease (COPD) and chronic cough and entertained by a lively debate on e-cigarettes, before receiving some case-based insight into occupational lung diseases. The symposium attracted a multi-professional audience and was webstreamed to 39 centres worldwide.

## ACUTE MEDICAL ADMISSIONS: HOW THE FUTURE MIGHT LOOK

In the Stanley Davidson endowed lecture, Professor Tim Evans (Royal Brompton & Harefield NHS Foundation Trust, London) highlighted the various pressures facing acute medical admissions, including rising emergency admissions, an increasingly complex, ageing patient population and greater workforce pressures. The report of the Future Hospital Commission emphasised the need for integrated 'whole-system' care.<sup>1</sup> The report's recommendations include a new leadership structure, overseen by a 'Chief of Medicine', to enable high-quality holistic care to be delivered with compassion and continuity and with an appropriate balance between generalist and specialist input.

## DOMICILIARY CARE OF ACUTE RESPIRATORY ADMISSIONS

Outpatient investigation of pleural effusion is increasing, but definitive treatment frequently mandates admission. Dr Anur Guhan (University Hospital, Ayr) recounted his experience of using indwelling pleural catheters in the first-line management of malignant effusion. This

approach promotes patient independence and helps to avoid admission and delay to starting chemotherapy.

How can we safely identify which patients with acute exacerbation of COPD can be managed at home? Dr Rod Lawson (Royal Hallamshire Hospital, Sheffield) focused on the importance of the initial triage to identify life-threatening exacerbations, patient preference, efficient inter-team communication and the iterative process required if home treatment fails and alternative diagnoses require consideration.

When safely selecting patients for home treatment of pulmonary embolism, Professor Clive Kearon (University of McMaster, Hamilton, Canada) outlined the importance of ensuring adequate cardiopulmonary reserve and the absence of excessive bleeding risk or symptoms necessitating admission. The simplified pulmonary embolism severity score can help to identify the 35% of patients who are at lowest risk.<sup>2</sup> The advent of newer anticoagulants that do not require daily international normalised ratio monitoring will undoubtedly facilitate domiciliary treatment.

Dr Claire Mackintosh (Western General Hospital, Edinburgh) gave a detailed account of the practicalities of setting up an outpatient antibiotic service, including the preparation of a business case. Respiratory infections (for example, pulmonary abscess and MDR-TB) can be suitable for outpatient management although re-admission rates are relatively high in these patient groups.

## WHAT'S NEW IN RESPIRATORY PHARMACOLOGY?

Professor Peter Calverley (University of Liverpool and University Hospital Aintree, Liverpool) summarised the evidence for several new, long-acting  $\beta$ -agonists (LABA)

and long-acting muscarinic antagonists in patients with COPD. Roflumilast, a once-daily oral prostaglandin E4 inhibitor, significantly reduces the rate of severe exacerbations and hospital admissions in patients with severe COPD and recurrent exacerbations already on combination inhaled corticosteroid/long-acting  $\beta$ -agonists or triple therapy.<sup>3</sup>

Chronic cough is common and often refractory to treatment. Professor Jacky Smith (Centre for Respiratory and Allergy, University of Manchester) discussed potential drug targets within the vagal afferent pathways involved in the cough reflex. In a phase II study, blocking P2X3 receptors (present in airway C fibres) dramatically reduced daytime cough by around 75%.<sup>4</sup>

### DEBATE: THIS HOUSE BELIEVES E-CIGARETTES WILL HAVE A POSITIVE EFFECT ON SOCIETY

Professor John Britton (UK Centre for Tobacco & Alcohol Studies, University of Nottingham) argued that we do not need clinical trials to prove that e-cigarettes have fewer health risks than smoking, especially when other forms of nicotine replacement appear safe. Only 0.14% of never-smoking adults use e-cigarettes.<sup>5</sup> More than 80% of children have never tried e-cigarettes and, of those who have, very few use them regularly.

Professor Gerard Hastings (Institute for Social Marketing, University of Stirling) asked why we should guess at the risks when the evidence-base for e-cigarettes is lacking and nicotine is still under scrutiny as a potential carcinogen. He argued that we should aim to empower the public, not to encourage ongoing addiction and the rehabilitation of the tobacco industry. He warned us that we cannot be certain that teenagers who use e-cigarettes would otherwise be smoking.

### REFERENCES

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- 2 Jimenez D, Aujesky D, Moores L et al. Simplification of the pulmonary embolism severity index for prognostication in patients with acute symptomatic pulmonary embolism. *Arch Intern Med* 2010; 170: 1383–9. <http://dx.doi.org/10.1001/archinternmed.2010.199>
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### CASE-BASED DISCUSSIONS: OCCUPATIONAL LUNG DISEASES AND THEIR LEGAL PERSPECTIVES

Professor Sherwood Burge (Heartlands Hospital, Birmingham) reminded us about potential occupational exposure in asthma and domestic exposure in mesothelioma. We have a duty to provide advice to our patients in relation to continuing employment and compensation. He highlighted the difference between Industrial Injuries Benefit and common law negligence claims; the latter must be made within three years of a patient knowing their diagnosis.

### TAKE HOME MESSAGE

The symposium provided an inspiring range of talks, ranging from practical solutions to the many challenges facing our future practice to exciting new developments in respiratory pharmacology. The surging popularity of e-cigarettes ensured a debate that was especially pertinent to our everyday practice.