### **Airwaves**

Wisia Wedzicha, Editor-in-Chief

# Obesity hypoventilation: CPAP or bilevel support

Obesity hypoventilation (OHS) is a significant clinical problem and associated with increased healthcare resource. OHS patients often develop respiratory failure, and in this month's Thorax. Piper and colleagues report on a study comparing CPAP with bilevel ventilatory support as initial management. OHS patients with severe persisting nocturnal hypoxamia were excluded and then the remainder were randomised to one of the two interventions. Results showed no difference between the two therapies with respect to daytime hypercapnia which was the primary outcome, but patients on bilevel support reported better subjective sleep quality than those on CPAP. This was a three-month study and longer term trials of interventions in OHS are now required. See page 395

# Antibiotics in COPD exacerbations: for how long?

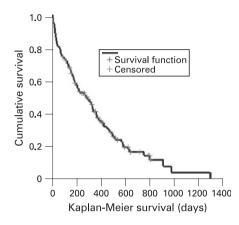
The topic of antibiotic therapy at COPD exacerbations has always been surrounded in controversy, mainly due to lack of understanding of the precise role of bacteria both in stable COPD and at exacerbation. However recent studies have shown more clearly that airway infection contributes to the inflammatory load of an exacerbation and thus antibiotics are indicated, especially when

increased sputum purulence and/or volume are present. In this issue, El Moussaoui and colleagues report on a meta-analysis of antibiotic studies at exacerbations to determine if a short course (five days or less) was as effective as longer courses. The results show that the former is as effective as the latter in mild to moderate exacerbations. In the accompanying editorial Wilson discusses these results and concludes that in patients without risk factors for poor outcome, a five-day antibiotic course should be used. *See pages 390 and 415* 

#### Treatment failure in pneumonia

As Menéndez and colleagues remind us in the introduction to their paper in this month's Thorax, community acquired pneumonia (CAP) is a serious health problem globally with 3-5 cases per 1000 adults and a significant mortality in hospitalised patients. Up to 15% of CAP patients develop treatment failure and this group is most at risk of death. The authors have studied a number of svstemic markers of CAP treatment failure in hospitalised patients. They show that median levels of CRP, interleukin (IL)-6 and procalcitonin (PCT) measured on days 1 and 3 of therapy were independently associated with higher risk of any treatment failure. The study also evaluated markers associated with late failure. Further studies are required to confirm the findings and whether adding inflammatory

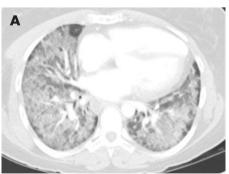
markers to other prognostic indicators improves identification of higher risk patients. *See page 447* 

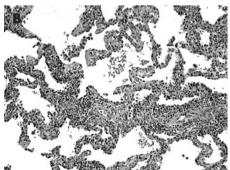


Survival in patients diagnosed with mesothelioma.

## Malignant mesothelioma in an unselected population

In this issue we report on a study of the natural history of mesothelioma and interventional practices in an unselected population from Leeds, UK. Results show that the median age at presentation is rising at 74 (range 35–93) years and performance status was worse than in selected cases. Median survival was also worse at 8.9 months. Thoracoscopic pleurodesis was associated with fewer recurrences. See page 435







(A) CT angiogram of the chest showing right middle lobe acute pulmonary embolus, with extensive bilateral ground glass opacities. (B) Surgical lung biopsy showing diffuse infiltration of the alveolar septa by lymphocytes and diffuse intra-arterial thrombosis. (C) CT angiogram of the chest following treatment (see page 470).