

Maternal asthma and congenital malformations

Pregnant women with asthma are advised to maintain optimal control of their asthma, although the effects of asthma and asthma medications on fetal development are not clear. In this issue of *Thorax*, Tata and colleagues describe a matched case-control study of children with malformations. The risk of malformation in children born to women with asthma was marginally higher than in those born to women without a diagnosis of asthma. However, this risk was not explained by the use of asthma treatment by the women. The results did suggest that the older cromones may be associated with a moderate teratogenic risk and thus should be avoided in pregnancy. In an accompanying editorial, Cazzola and Matera discuss the results, with the conclusion that the current practice of treating asthma in pregnancy is safe but still more long-term data is required on this issue. **See pages 944 and 981**

Reflux and COPD exacerbations

There has been much interest in the relationship between gastro-oesophageal reflux and asthma and reflux worsens asthma control. Chronic obstructive pulmonary disease (COPD) exacerbations are

episodes of symptom worsening, usually caused by viral or bacterial infections, although we know that infective triggers do not account for all exacerbations. In this month's *Thorax*, Terada and colleagues describe the impact of gastro-oesophageal reflux on COPD exacerbations. Exacerbation frequency was significantly associated with the reflux scores and symptoms were related to the occurrence of exacerbations. Further work is now required to investigate the mechanisms underlying these observations and whether therapeutic intervention for reflux symptoms can reduce COPD exacerbations. **See page 951**

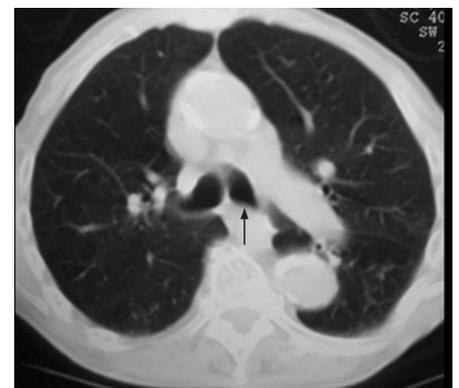
Mortality in acute lung injury

Lung protective ventilation is a technique that targets lower tidal volumes and has been shown to reduce mortality in acute lung injury. A number of factors are known to affect prognosis in acute lung injury but it is not clear whether these have changed since the introduction of lung protective ventilation. In this issue, Seeley and colleagues describe a study of early predictors of mortality and show that demographic and laboratory variables including age, pH and Acute Physiology and Chronic Health Evaluation (APACHE II) still predict death. In contrast, several

pulmonary variables were no longer related to mortality. However, the Oxygenation Index (OI) was found to be the best predictor of mortality. The authors conclude that OI may be superior to other prognostic factors as it integrates the important relationship between airway pressure and oxygenation into a single variable. **See page 994**

Granzyme K and airway inflammation

Granzymes belong to the family of serine proteases and granzymes A and B are involved in lung diseases. They are produced in a variety of cells and have been shown to trigger monocyte activation and induce apoptosis of virus infected cells. In this issue of *Thorax*, Bratke and colleagues describe a role for granzyme K (GrK) in inflammatory lung disease. Levels of GrK were normal in bronchoalveolar lavage (BAL) of patients with COPD and those with allergic asthma before challenge. However, GrK levels were elevated after allergen challenge and in pneumonia. Allergen induced GrK release was associated with GrK expressing CD8+T cells in BAL, suggesting a mechanism for recruitment of CD8 cells. **See page 1006**



CT scan suspicious of broncho-oesophageal fistula, black arrow (**see page 1024**).

See Pulmonary Puzzle **page 980**.