- 94 **Leigh BR**, Lau DH. Severe esophageal toxicity after thoracic radiation therapy for lung cancer associated with the human immunodeficiency virus: a case report and review of the literature. *Am J Clin Oncol* 1998;**21**:479–81.
- 95 **Miller AB**, Hoogstraten B, Staquet M, et al. Reporting results of cancer treatment. *Cancer* 1981;**47**:207–14.
- 96 **Cooper JS**, Fried PR, Laubenstein LJ. Initial observations of the effect of radiotherapy on epidemic Kaposi's sarcoma. *JAMA* 1984;**252**:934–5.
- 97 **Chak LY**, Gill PS, Levine AM, et al. Radiation therapy for acquired immunodeficiency syndrome-related Kaposi's sarcoma. *J Clin Oncol* 1988;**6**:863–7.
- 98 **Volberding P**. Treatment of malignant disease in AIDS patients. *AIDS* 1988;**2**(Suppl 1):S169–75.
- 99 **Vallis KA**. Glutathione deficiency and radiosensitivity in AIDS patients. *Lancet* 1991;**337**:918–9.
- 100 **Buhl R**, Jaffe HA, Holroyd KJ, et al. Systemic glutathione deficiency in symptom-free HIV-seropositive individuals. *Lancet* 1989;**334**:1294–8.
- 101 **Boal DK**, Newburger PE, Teele RL. Esophagitis induced by combined radiation and adriamycin. *AJR Am J Roentgenol* 1979;**132**:567–70.
- 102 **Rodriguez R**, Fontanesi J, Meyer JL, et al. Normal-tissue effects of irradiation for Kaposi's sarcoma/AIDS. *Front Radiat Ther Oncol* 1989;**23**:150–9.
- 103 **Senan S**, De Ruysscher D, Giraud P, et al. Literature-based recommendations for treatment planning and execution in high-dose radiotherapy for lung cancer. *Radiother Oncol* 2004;**71**:139–46.

LUNG ALERT

Allergen sensitisation and impaired lung function in children

▲ Illi S, von Mutius E, Lau S, et al. Perennial allergen sensitisation early in life and chronic asthma in children: a birth cohort study. *Lancet* 2006;**368**:763–70

This study investigated the role of allergic sensitisation early in life as a factor which may contribute to the progressive loss of pulmonary function in children with persistent asthma. 1314 children were followed from birth to age 13. IgE measurements and parental interviews about their child's asthma were conducted regularly. Allergen exposure, lung function, bronchodilator response, and histamine challenge were also assessed.

Sensitisation and concomitant exposure to high levels of house dust mite, cat and dog hair allergens in the first 3 years of life was associated with loss of lung function at school age: FEV₁/FVC 87.4 v 92.6 for those not sensitised ($p < 0.0001$), and MEF₅₀ 86.4 and 101.5 ($p = 0.0031$) respectively. In sensitised children with wheeze, high exposure levels also enhanced the development of airway hyperresponsiveness. Sensitisation and exposure later in life had less effect and seasonal allergens had no role. 90% of children with wheeze but no atopy were asymptomatic at school age and retained normal lung function to age 13.

This study shows that continuing allergic airway inflammation beginning in the first 3 years of life contributes to airway hyperresponsiveness and impairment of lung function at school age. Further investigation is required to see if early inhaled corticosteroid treatment in atopic wheezy infants can prevent loss of lung function. In non-atopic wheezing children the need for corticosteroids on a regular basis should be reassessed as they have a good prognosis.

U Gupta

Senior House Officer, William Harvey Hospital, Kent, UK; urmi33@hotmail.com