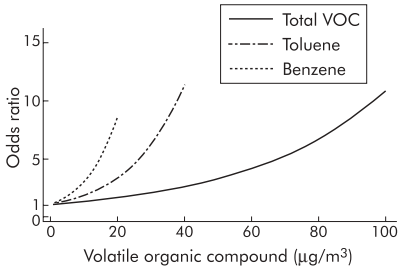
airwaves

Wisia Wedzicha, *Editor in Chief*

HOW IMPORTANT IS THE INDOOR ENVIRONMENT IN CHILDHOOD ASTHMA?

In this issue of *Thorax* we publish two papers on the effects of environmental factors in the home on childhood asthma. In the first study Phoa and colleagues describe a cross sectional study of schoolchildren aged 8–11 in Belmont, Australia. The relation between exposure to fume emitting heaters, currently and during the first year of life, and the risk of asthma was studied. Although there was no association between current use of heaters and asthma, there was an association between exposure to heaters in the first year of life and airway hyperresponsiveness and recent wheeze. In the second study Rumchev and colleagues evaluated the relation between domestic exposure to volatile organic compounds (VOCs) and asthma in a case-control study in young children in Perth, Western Australia aged between 6 months and 3 years. They found that cases of asthma were exposed to greater VOC levels than controls and that the highest odds ratios for asthma were associated with benzene exposure, followed by ethylbenzene and toluene. Domestic exposure to VOCs below accepted recommendations may increase the risk of asthma. These results and those of related studies are discussed in the accompanying editorial by Brunekreef, who makes the point that the two studies have a number of methodological problems and further prospective studies are required. As children spend so much time indoors, the issue of the home environment needs to be sorted out.

See pages 729, 741 and 746



Asthma in young children associated with exposure to indoor volatile organic compounds.

CARDIOVASCULAR RISK AND SLEEP APNOEA

Patients with obstructive sleep apnoea (OSA) have an increased cardiovascular risk, although it is not clear whether this risk is an independent effect or due to other factors such as obesity. In this issue of *Thorax* Robinson and colleagues describe a study where cardiovascular risk markers were estimated before and after 1 month of CPAP therapy in patients with OSA. The study showed that a number of activated coagulation factors are increased in untreated OSA patients, but these do not fall with 1 month of CPAP therapy. A fall was noted in total cholesterol, although the authors suggest that this needs to be confirmed in a larger prospective study. There was no association between the markers and disease severity. The authors conclude that the increased cardiovascular risk may be due to associated factors and previous cardiac disease rather than the OSA itself.

See page 777

OUTCOME OF LAM

Lymphangioleiomyomatosis (LAM) occurs in young women, causing a progressive lung disease with cystic lung disease and recurrent pneumothoraces. Johnson and colleagues report a study of the longer term prognosis of LAM using the UK national LAM database. The study showed that 10 year survival, although variable, was 91% from onset of symptoms and 11 patients were alive after 20 years. Ten years after the onset of symptoms 55% developed MRC grade 3 dyspnoea and 23% were receiving oxygen therapy. The authors conclude that obtaining survival data on a rare disease is difficult, and the value of the study is in providing helpful information for testing interventions in this condition.

See page 800

AFTER LUNG TRANSPLANTATION FOR CF

Patients with cystic fibrosis who are recipients of lung transplants generally have normal lung function. In this issue of *Thorax* Pinet and colleagues describe the effect of lung transplantation on respiratory and limb muscles in cystic fibrosis. The results show that the abdominal and diaphragm muscles have good strength and bulk in patients studied 4 years after transplantation, but weakness was found in the quadriceps muscle caused by muscle atrophy. The muscle weakness was related to corticosteroid therapy and was associated with a reduction in exercise capacity. This study provides important information for the mode of rehabilitation after transplantation in patients with cystic fibrosis.

See page 783

PREVENTION OF OSTEOPOROSIS IN ASTHMA

In this month's *Thorax* we publish a paper by Campbell and colleagues on behalf of the BTS Research Committee in which the effects of etidronate and/or calcium were studied for the prevention and treatment of osteoporosis in asthmatics receiving long term oral and/or inhaled steroids. The study was performed in 39 chest clinics in the UK and the results showed that, in patients taking glucocorticoids, etidronate increased bone mineral density over 5 years at the lumbar spine but not the hip. Except possibly in postmenopausal women, there was little protective effect against fractures and calcium had no further advantage. Further work is required to determine how patients can be protected from fractures, and it is possible that some of the newer biphosphonates may be more effective.

See page 761