Do we overlook respiratory symptoms and airflow obstruction in elderly medical admissions?

SIR—Airflow obstruction is often overlooked in elderly subjects living at home [1]. Whether this is also true of acute elderly admissions is not known.

We prospectively studied 100 consecutive patients aged 65 years and above admitted to acute general medical wards at a district general hospital. We excluded patients who were known to have chronic obstructive airways disease and those unable to perform spirometry. Within 5 days of admission, we asked subjects to complete a respiratory questionnaire previously used in epidemiological studies of respiratory disease in older people [2]. We performed spirometry on all patients. If airflow obstruction was present [the ratio of forced expiratory volume in 1 s (FEV₁) to forced vital capacity (FVC) was <60% and the FEV₁ <80% predicted], we repeated measurements after 200 µg salbutamol inhaled via a large volume spacer device. Reversibility was taken to be >15% improvement in FEV₁ with a 200 ml increase in FEV₁ [3]. If patients had no reversibility to salbutamol, we repeated spirometry after 40 µg ipratropium bromide.

Of 100 patients, 54 were excluded (22 had known chronic obstructive airways disease, 32 were unable to perform spirometry). Of 46 patients not known to have chronic airflow obstruction (mean age 80 years, range 65–93), 35 (76%) reported any respiratory symptom. Twelve (26%) patients had airflow obstruction, of whom five (42%) demonstrated reversibility to bronchodilators. At least one respiratory symptom was reported by all 12 patients with undiagnosed airflow obstruction and by 23 of 34 (68%) patients without airflow obstruction.

Respiratory symptoms and airflow obstruction in older people admitted to hospital are common and frequently overlooked. Respiratory symptoms have low specificity for respiratory disease in older people [4]. Studies are currently underway to address whether patients with undiagnosed chronic airflow obstruction derive benefit from treatment. We would recommend objective lung function assessment with spirometry for elderly patients with respiratory symptoms.