Open access to spirometry with chest x-ray

Sir,
Open access chest x-rays are available to patients referred by their general practitioners in 96% of health districts (British Thoracic Society report, 1987). Many referrals are for dyspnoea or wheezing.

In 1984, an open access service to general practitioners in the Bristol and Weston health district, based at the Bristol Royal Infirmary, was set up to provide a combined chest x-ray and spirometry service with a written report. We have reviewed the first three years of this service to determine its usefulness.

The service
Patients may attend between 09.00 and 10.00 hours each weekday. They are sent directly with a request card, allowing the general practitioner to give a brief clinical history and request spirometry with or without chest x-ray. Each patient is carefully questioned by a technician and a modified Medical Research Council questionnaire completed. Measurements of one second forced expiratory volume, forced and relaxed vital capacity and peak expiratory flow are made before and after inhalation of a bronchodilator. If requested, a posterior anterior and left lateral chest x-ray are obtained. The total time for attendance is about one hour. An experienced physician reports on the spirometry and chest x-ray. A written report with suggestions for treatment or further investigations where appropriate is sent out within a week. If a major abnormality is detected, the general practitioner is contacted immediately.

Survey of service
Questionnaires were sent out to 284 general practitioners within the health district; 72 had previously used the service on one or more occasions. Forty one of the 72 (57%) returned their questionnaire. All regarded the service as useful and the reports helpful in the diagnosis and management of their patients. Three thought that possibly more information could be given in the report about further investigations or treatment. Forty one per cent of respondents wanted automatic referral for more detailed studies if the results were inconclusive, while 17% suggested that further investigations should be made available: exercise tests (three), blood gases (one), allergy skin tests (two) and carbon monoxide transfer factor (one).

Of the 212 general practitioners who had not used the service 161 (76%) replied to their questionnaire; 59% were unaware of the service and requested further information and 25% have now referred patients. Twenty two percent preferred direct referral for an outpatients appointment, 27% thought the hospital too inconvenient or too far away, 1% (two doctors) thought the times available were too limited and 1% thought the service provided no useful information.

Analysis of referrals
Of the 439 referrals, 108 were for spirometry and 331 for chest x-ray plus spirometry. A normal chest x-ray was reported in 128, of whom 69 had spirometric values within normal limits. Abnormalities were noted on 203 chest x-rays, of which 33% had spirometry within normal limits. Referral to the outpatients department was suggested for 60 cases; further tests, steroid therapy or a change of treatment was suggested in 71; a suspicion of malignancy was noted in nine.

Conclusions
One hundred and thirteen general practitioners have now referred patients to the open access service and have received a written report on the results for each patient. The service was found to be helpful in the diagnosis and management of patients within the community.

Spirometry is used for the assessment of lung function and it is an advantage to use an instrument where a permanent record of the spirogram is obtained. Few health centres are able to offer their patients this facility. Referral to a specialist laboratory is justified where peak flow measures do not yield unequivocal results.

E C Smith
D SMITH
A H KENDRICK
G LASZLO
Respiratory Department
Bristol Royal Infirmary
Bristol BS2 8HW

Exotic disease in a traveller? A case of leptospirosis

Sir,
With increasing tourist travel abroad, unusual diseases are presenting to UK practitioners ever more frequently. We would like to highlight yet another.

A 34 year old aircraft technician based in West Germany was on temporary duty to a service unit in Sardinia. Three days after arrival he presented sick to his general practitioner, having just completed a six hour shift working in an ambient temperature of 45°C and high humidity. He gave a history of general malaise, feeling hot and dizzy, which had gradually got worse throughout the day. His major complaint was of aching muscles in his arms and legs and of increasing discomfort. On examination he was noted to have a core temperature of 39°C and looked unwell. He was sweating freely but was not dehydrated. The muscles of his arms and legs were noted to be tender. A clinical diagnosis of heat fatigue was made, and the patient was treated with oral fluids, antipyretic agents and he was nursed in an air conditioned room. After 10 hours he remained unwell with a persistent pyrexia but no localizing signs, and he was admitted to a local hospital. Urine analysis at this stage revealed dipstick haematuria, proteinuria and bilirubinuria. His liver function tests were mildly deranged, but all other investigations were unremarkable. His renal function was not impaired. At this stage, following direct questioning, the patient