Correspondence

High prevalence of familial sarcoidosis in an Irish population

SIR,—Dr NJ Brennan and others ended the discussion of their interesting paper on familial sarcoidosis (January 1984, p 14) by suggesting that a study of familial sarcoidosis combined with HLA marker studies might help to delineate the relative contributions of genetic and environmental factors in the pathogenesis of the disease. HLA specificities were estimated in 14 families where more than one member had sarcoidosis.¹ The haplotype segregation in the affected relatives of propositi was very similar both to predicted distributions and to the distribution in unaffected relatives. The study was done before DR specificities had been properly defined but, since this was a family study, haplotypes were identified and the haplotype A1/B8 is in very close linkage disequilibrium with an antigen, DR3, which is of particular interest. HLA family studies have a number of advantages over investigations of populations of unrelated individuals having disease and the negative results of this investigation are the best evidence so far available against an association between HLA and the development of sarcoidosis. However, the paper by Dr J Gardner and others (January 1984, p 19) showing an HLA association with good prognosis provides further evidence in support of two previous independent studies.^{2,3} It seems that even if HLA does not influence the development of sarcoidosis it does modify the way that the disease is expressed once it has developed.

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¹ Turton CWG, Morris L, Lawler SD, Turner-Warwick M. HLA in familial sarcoidosis. In: Jones-Williams W, Davies BH, eds. *Proceedings of the Eighth International Conference on Sarcoidosis and Other Granulomatous Diseases*. Cardiff: Alpha Omega, 1980:195-200.

² Smith MJ, Turton CWG, Mitchell DN, Turner-Warwick M, Morris LM, Lawler SD. Association of HLA B8 with spontaneous resolution in sarcoidosis. *Thorax* 1981;36:296-8.

³ Neville E, James DG, Brewerton DA, James DCO, Cockburn C, Fenichel B. HLA antigens and clinical features of sarcoidosis. In: Williams WJ, Davies BH, eds. *Proceedings of the Eighth International Conference on Sarcoidosis and Other Granulomatous Diseases*. Cardiff: Alpha Omega, 1980:201-5.

** This letter was sent to the authors, and Professor Fitzgerald replies below.

SIR—Dr Turton is correct in pointing out our omission of a reference to a valuable HLA study in familial sarcoidosis with which he was associated. We were aware of this work and included the reference in earlier drafts but unaccountably omitted it from our final submission.

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Definitions of emphysema, chronic bronchitis, asthma, and airflow obstruction

SIR,—We read the excellent editorial by Drs CM Fletcher and NB Pride (February 1984, p 81) with pleasure. We would, however, disagree with one term that they suggest. They recommend that the term chronic airflow obstruction or limitation should be used for persistent airflow obstruction. We wholeheartedly agree with the term chronic airflow obstruction but object that chronic airflow limitation is ambiguous. The latter term does not exclude airflow limitation as the result of reduced driving force as in advanced restrictive lung disease, where the decreased lung volume is the principal cause of reduced flow. In chronic obstructive pulmonary disease, however, there is obstruction to flow, whether as a result of airways collapse or of narrowing. If there is ever a need for pedantic exactitude it must be in precision of definition, so that we may achieve a generally agreed and unequivocal clinico-pathological system of classification.

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** This letter was sent to the authors, and Dr Pride replies below.

SIR,—We agree that maximum airflow can be reduced when there is respiratory muscle weakness or severe loss of lung volume, and this is a disadvantage of the term airflow limitation.

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Retrieval of left atrial catheters with a mediastinoscope

SIR,—Continuous monitoring of the left atrial pressure is widely used both in the operating room and in the intensive care unit in the management of patients undergoing open heart surgery. The catheter is usually fixed, at its entrance either to the left atrium or to the pericardium, to prevent its displacement during the operation. Occasional difficulty is encountered when removing the left atrial pressure line if the retaining suture has not been divided before the chest is closed or if the line fragments when an attempt is made to remove it. In either situation its recovery is essential because a retained fragment can cause a recurrent bacteraemia,¹ initiate thrombus formation, or cause immobilisation of the disc prosthesis.²

Since Carlens introduced the mediastinoscope in 1959, it has been found to have several diagnostic and therapeutic uses.³ We have employed it successfully to retrieve a left atrial pressure monitoring catheter without reopening the chest in two patients. In one patient who had his mitral valve replaced the temporary anchoring stitch for the left atrial catheter was not cut before the chest was closed. The

second patient had coronary artery bypass grafting. The pericardium had been closed in the former case and it was left open in the latter. The left atrial pressure monitoring catheter fragmented when an attempt was made to remove it from the second patient. On both occasions the anchoring stitch was successfully divided with the help of the mediastinoscope and the catheters were easily removed.

With the patient under general anaesthesia the lower part of the median sternotomy wound was opened. The mediastinoscope was then negotiated behind the xiphoid through the previously detached diaphragmatic attachment and cautiously introduced into the pericardium. The pericardium, although it was closed in one patient, did not prove to be a barrier to its insertion. The mediastinoscope was then passed along the residual left atrial pressure line, which was traced to its source from the left atrium. The offending suture was cut and the line was withdrawn. The lower part of the wound was then resutured.

The technique is easy and simple and it obviates the need for repeat sternotomy. It can be performed safely in the intensive care unit in a short time without the need to move the patient to the operating theatre; either local or light general anaesthesia is used. No additional instruments, other than those routinely used for cervical mediastinoscopy, are required.

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¹ Reyes LH, Ratzan KR, Rheinlander HF. Serratia marcescens bacteraemia originating from a catheter line in the left atrium after mitral valve replacement. *J Thorac Cardiovasc Surg* 1973;**65**:241-4.

² Behl P Raj, Brown AH. Late snaring of Lillehei-Kaster prosthesis by a fragment of left atrial monitoring catheter. *Thorax* 1983;**38**:879-80.

³ Carlens E. Mediastinoscopy: a method for inspection and tissue biopsy in the superior mediastinum. *Dis Chest* 1959;**36**:343-52.

Lung abscess resulting from grass inflorescence

SIR,—An 11 year old girl underwent right lower lobectomy for a chronic lung infection of interesting aetiology. At the age of 7 she had inhaled what she steadfastly maintained

was an ear of barley. She was unavailingly given antibiotics for pyrexia, cough, and shoulder tip pain and after five days was admitted to hospital with right lower lobe pneumonia. Neither x-ray examination nor bronchoscopy revealed a foreign body, though the right main bronchus was haemorrhagic and oedematous. Five months later she was readmitted with haemoptysis and pyrexia. Repeat bronchoscopy and a bronchogram showed a diseased right lower lobe. Thoractomy was considered, but rejected because of her age and lack of definite evidence of inhalation. For four years she was symptom free and gained weight normally. Three months before thoracotomy she suffered cough, pleuritic pain, and haemoptysis. At operation there was gross inflammation of the lung, which was adherent to the diaphragm. A right lower lobectomy was performed; the excised specimen contained a 35 mm abscess in and around the right lower lobe bronchus, at the centre of which was an ear of grass identified as *Hordeum murinum* (wall barley). She made a good recovery and remains well.

The ears of the grass family have spikelets and on inhalation these may act as barbs preventing backward movement. They may lodge locally causing airway obstruction with hyperinflation and infection. A chest radiograph may show the appearances of consolidation, collapse, or emphysematous change. Frequently it is normal. Grasses can migrate distally causing abscess formation, even penetrating the chest wall.¹ Bronchoscopic removal is preferred to physiotherapy and postural drainage.² If this fails, early thoracotomy before abscess formation has occurred may allow bronchotomy rather than lung resection.

The diagnosis of radiolucent foreign bodies beyond the reach of the bronchoscope relies on acceptance of a history of inhalation. We believe that the accounts given by children are usually accurate and a more ready acceptance of their veracity may well avoid unnecessary delay and complications.

We would like to thank Dr David F Cutler, Royal Botanic Gardens, Kew, for identifying the ear of grass.

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¹ Jackson C. Grasses as foreign bodies in the bronchus and lung. *Laryngoscope* 1952;**62**:897-923.

² Anonymous. Inhaled foreign bodies. *Br Med J* 1981;**282**:1649.