be balanced against the attendant risks of life threatening infections and possible treatment with antibiotic regimens that may be teratogenic. The five year survival rate following single lung transplantation is 40%,[10] and there is a significant risk that a mother will not live to see her child reach maturity.

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Thorax 1996;**51**:1164–1165

Commentary

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These three case reports all have lung transplantation as a common unifying theme but otherwise appear at first sight to comprise a heterogeneous collection. Each case, however, provides useful information regarding the management and understanding of lung disease in general. The careful study of patients undergoing lung transplantation for respiratory disease provides the potential for a rich source of information of help in our understanding of the basic mechanisms of lung diseases and their management that greatly extends beyond problems of alloreactivity alone. This is an exciting new avenue of research that is currently under extensive study in lung transplant centres worldwide.

Robinson *et al* describe a patient who underwent right single lung transplantation for severe acute interstitial pneumonia which subsequently improved in his native left lung after surgery. The patient had atypical clinical and radiological features of idiopathic pulmonary fibrosis and a lack of positive autoantibodies or raised systemic inflammatory markers. Failure to respond to high dose steroid therapy appeared to be the feature which prompted the decision to perform an open lung biopsy and, of course, the indications as to when and by which means lung biopsy specimens should be taken in patients presenting with diffuse parenchymal lung disease remains controversial. The improvement in radiographic appearances of the native left lung after right single lung transplantation is intriguing and contrasts markedly with our own experience of single lung transplantation in patients with idiopathic pulmonary fibrosis. We have never recognised improvements in the native lung in 28 such patients. In fact, the lung is frequently seen to continue to shrink and end up completely consolidated. Although the improvement seen in this case may in part be explained by the transplantation allowing time for spontaneous resolution to occur, it is more tempting to ascribe it to the effects of immunosuppression. We are not told whether the patient had any episodes of rejection treated by pulsed methylprednisolone, but he certainly received immunosuppression comprising azathioprine, cyclosporin, and prednisolone. Important messages relate to the need to ensure that best medical treatment has been given prior to referral for transplantation and the appropriate use of a single lung graft compared with bilateral grafts in this case, in view of the subsequent events. The identification of a specific histological picture that is distinct from usual interstitial pneumonia underlines the value of open lung biopsies in atypical cases and should alert physicians to the need for intensification of immunosuppression in those patients with acute interstitial pneumonia who fail to respond to conventional therapy.

Egan *et al* describe a patient who developed irreversible graft dysfunction with alveolar fibrosis associated with Epstein-Barr virus (EBV) infection on immunocytochemistry after heart lung transplantation. A specific antigen diagnostic of EBV replication was identified, although EBV latent membrane protein and nuclear antigen 2 were negative. The interpretation that EBV replication was the cause of graft failure and fibrosis is, of course, speculative and it remains possible that the EBV replication was coincidental. Nevertheless, there is current interest in the potential relationship between EBV and idiopathic lung fibrosis in general and this case at least provides some further evidence of the fibrogenic potential of EBV. It would have been both interesting and informative if the tissue had been examined for the presence of proliferative cytokines such as TGF-β. We have had the opportunity to study lung biopsy tissue from a

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patient who developed cryptogenic organising pneumonia after undergoing lung transplantation for the presence of EBV but found no evidence of EBER 1 or 2 mRNA using in situ hybridisation. A further important point brought out by this case is that, although obliterative bronchiolitis remains the commonest cause of irreversible graft dysfunction following lung transplantation, there are other causes and any patient with atypical clinical, radiological or physiological features should undergo an appropriate biopsy. The value of ensuring lung tissue is prepared for subsequent immuno and molecular pathology as well as routine histology is also borne out by this case.

The case reported by Parry *et al* describes the course and subsequent clinical effect of pregnancy in a single lung transplant recipient. Although the outcome of pregnancy was successful, the recipient developed obliterative bronchiolitis which stabilised following treatment with total lymphoid irradiation. The clue to the presence of obliterative bronchiolitis prior to the decline in FEV_1 lay in the identification of *Pseudomonas aeruginosa* in the lower respiratory tract at bronchoscopy when the recipient was 15 weeks pregnant. It would be interesting to know whether the flow volume loop suggested airflow obstruction at this time since a reduction in expiratory flow at low lung volumes is a more sensitive physiological index of obliterative bronchiolitis. The potential for pregnancy to have an adverse effect on transplant recipients in terms of an increased risk of rejection remains speculative. The case report reminds us that lung transplantation offers young women the possibility of motherhood but that, as in patients with lung disease such as cystic fibrosis, there is potential for this to be at the expense of her continued health. The delivery of a normal child is, of course, gratifying and in keeping with a number of reports in the transplantation literature. We have experience of three pregnancies in our lung transplant recipients to date, all of which have produced normal healthy children. However, as in this case one mother developed progressive obliterative bronchiolitis after delivery and subsequently died. It is our policy now to advise those transplant recipients who wish to become pregnant to wait two years after transplantation so that their individual risk for developing obliterative bronchiolitis can be estimated and they can be appropriately counselled.

Thorax 1996;51:1165–1167

Silicosis presenting as bilateral hilar lymphadenopathy

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Received 9 October 1995
Returned to authors 8 December 1995
Revised version received 21 February 1996
Accepted for publication 27 March 1996

Abstract

Classical radiographic features of patients presenting with silicosis are diffuse interstitial shadowing with subsequent enlargement of hilar nodes, sometimes with "eggshell" calcification. Five case histories are described of workers who were exposed to silica and presented initially with bilateral hilar lymphadenopathy without radiographic evidence of interstitial lung disease. One case progressed to show features of silicosis.

(*Thorax* 1996;51:1165–1167)

Keywords: silicosis, bilateral hilar lymphadenopathy.

Silicosis is a fibrosing lung disease resulting from the inhalation of free silica. Workers in industries where exposure to silica dust occurs are at special risk of developing silicosis and have regular screening chest radiographs. Classically, the earliest radiographic feature consists of small discrete opacities which gradually increase and may be followed by enlargement of hilar nodes.[1] In the course of screening employees at industrial plants engaged in producing silicaceous materials for the pottery industry five workers have been encountered in whom the chest radiographic abnormality was that of bilateral hilar lymphadenopathy alone. These workers had heavy exposure to crystalline silica in the form of cristobalite and quartzite. Four had worked in the same sand processing plant and were exposed to cristobalite; the fifth worked a few miles away in the crushing shed of a quarry exposed to quartzite.

Case histories

CASE 1

A 28 year old man presented in April 1980 after a routine chest radiograph showed prominent hilar shadowing. Four years earlier the radiograph had been normal. He admitted to having an unproductive cough but was otherwise asymptomatic with no abnormal signs detected on physical examination. He had worked as a dry processor at an industrial sand company for the previous five years. This involved the crushing of red sandstone into a fine powder which was then calcined (heated) to form cristobalite. Before this he had worked as a butcher and briefly as a farm worker. He had never smoked. His blood count and biochemical profile were normal and erythrocyte sedimentation rate (ESR) was 6 mm/hour. A Mantoux test was positive and Kveim test negative. Pulmonary function tests showed a mild mixed obstructive-