THE ACQUIRED IMMUNE DEFICIENCY SYNDROME: A REPORT OF THE FIRST CASE IN MALAYSIA

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INTRODUCTION

The acquired immune deficiency syndrome (AIDS) requires no further introduction. Since 1981, when the AIDS was first recognized in the United States, much interest, anxiety and fear have been generated among people all over the world. It has spread inexorably in the United States, Europe and Africa such that the World Health Organization has warned of the beginning of a worldwide epidemic of AIDS. Asia has been relatively spared; nonetheless cases have been reported from Thailand, India, Taiwan, China and Japan.[1] Malaysia has anticipated the appearance of the disease; an AIDS task force under the auspices of the Ministry of Health was established in early 1986. However, it is only a year later that we now report the first case of AIDS in this country.

CASE HISTORY

Our patient is a 45-year-old Chinese male of Malaysian origin who has been residing overseas for the past 30 years. He had been well until a week before admission when he developed high fever with chills and rigours and a severe cough productive of white mucoid sputum. At admission he was in overt respiratory failure; he was tachypnoeic, cyanosed and extremely distressed. Examination of the lungs revealed bilateral coarse crepitations, and a chest X-ray showed widespread opacities in both lung fields (Fig. 1). An arterial blood gas examination revealed a pO2 of 39.8 mmHg and a pCO2 of 28.7 mmHg consistent with a Type 1 respiratory failure. In addition, he had fairly severe oral thrush (Fig. 2). There was however no skin rash nor lymphadenopathy.

His respiratory difficulty worsened soon after admission and he needed ventilatory support. Microscopic examination of sputum, stained with Gomori silver methenamine meanwhile demonstrated *Pneumocystis carinii* (Fig. 3). A diagnosis of AIDS was thought to be likely and soon confirmed when antibodies to the human immunodeficiency virus (HIV) was detected using both the enzyme-linked immunoabsorbent assay (ELISA) and Western blot techniques. There was no evidence of other systemic diseases to account for the immune deficiency.

He improved rapidly with high dose co-trimoxazole four tablets q.i.d. and was able to be taken off the ventilator. Although he developed a transient macular rash at the start of the treatment, subsequent recovery was uneventful. He was discharged after two weeks with co-trimoxazole 2 tablets b.d. as prophylaxis against relapse of the *Pneumocystis carinii* pneumonia.

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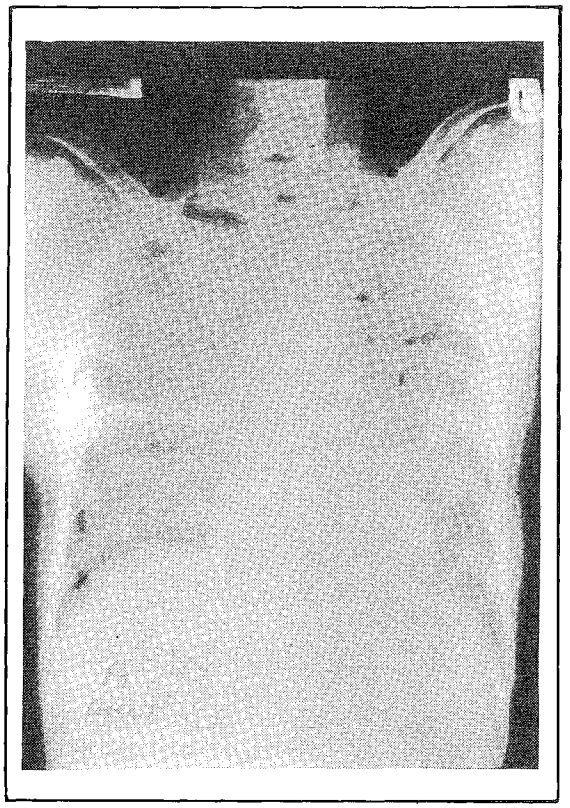

Fig. 1 Chest X-ray showing widespread soft opacities in both lung fields.

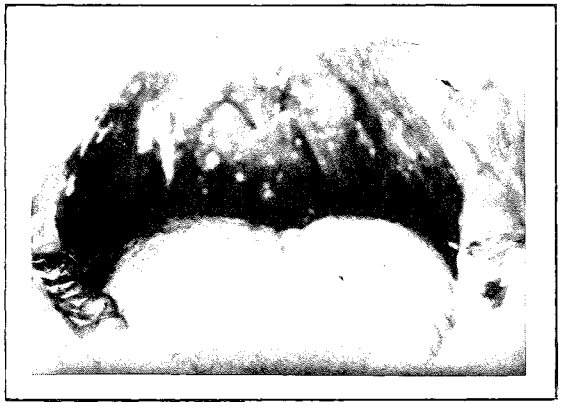

Fig. 2 Extensive oral thrush.

Other laboratory tests were also consistent with the diagnosis: lymphopenia – an absolute lymphocyte count of 735/mm^3 (total white count of 4,900/mm^3 with 15% lymphocytes); an inversed T-helper/T-suppressor cell ratio of 16%: 51%. Antibodies to cytomegalovirus and toxoplasmosis were not detected.

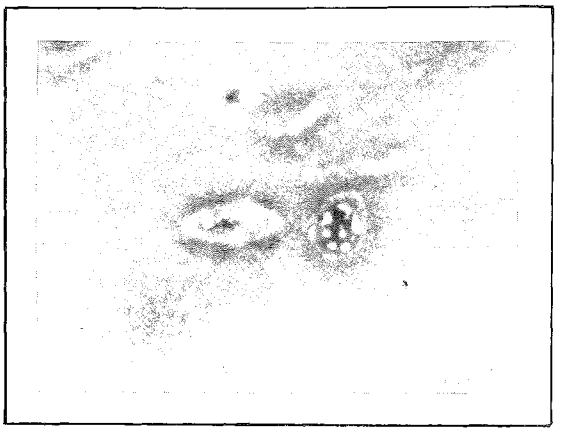

Fig. 3 GMS stain x 100: Photomicrograph of tracheal secretion examined under phase-contrast microscopy showing *Pneumocystis carinii* cysts.

The patient is a heterosexual and has denied any homosexual practices in the past. He was for a period of time polygamous following the divorce from his wife about ten years ago. He has not received any blood transfusions nor indulged in any intravenous drug abuse.

DISCUSSION

While HIV carriers have been detected before in Malaysia, no case of fullblown AIDS has been reported.

AIDS presented in a characteristic fashion in our patient; an otherwise healthy man developing *Pneumocystis carinii* pneumonia and oral candidiasis.

While patients with AIDS are prone to a whole host of opportunistic infections and malignancies, *Pneumocystis carinii* pneumonia (PCP) and Kaposi's sarcoma (KS) are the commonest initial manifestations of the syndrome. 51% of patients with AIDS have been reported to present with PCP alone, 27% with KS alone and 7% with both PCP and KS.[2]

PCP may present insidiously or as a fulminant pneumonia as with our patient. Often, physical signs may be absent or minimal apart from tachypnoea. Chest radiographs may initially be normal or may show only subtle infiltrates.

PCP almost invariably responds to treatment with trimethoprim-sulfamethoxazole. Response

rates with survival during first episodes are reported to be as high as 93%.[3] However, frequent adverse effects with the use of this antibiotic in AIDS patients have been noted. Up to 30% of patients were reported to develop hypersensitivity rashes and leucopenia.[4] Pentamidine isethionate is the alternative drug used in the treatment of PCP when side-effects are intolerable or if the patient does not respond to treatment. Failure to respond to treatment should also prompt a search for concomitant infections or other pulmonary complications of AIDS.

In contrast to other immunocompromised patients, AIDS patients appear to resolve their *Pneumocystis carinii* pneumonia less effectively and are more prone to relapses.[4] Owing to the high relapse rate, patients with AIDS, as in our patient, are usually put on prophylactic trimethoprim-sulfamethoxazole or pyrimethamine-sulfadoxine (Fansidar) following treatment of proven pneumocystis pneumonia.

Since 1981, the number of AIDS patients has steadily increased. As of October 1986, a total 33,217 AIDS cases were reported to the World Health Organization.[1] While it was initially thought to be a disease confined to homosexuals and intravenous drug abusers, this seems to be no longer the case as the African AIDS experience has shown.[5] In the West too, more and more cases of heterosexual AIDS have been reported, as with our patient. The potential for widespread transmission of the disease is therefore enormous. The size of the problem is further increased when one considers the fact that clinical AIDS forms only a small proportion of all HIV infections[6] and the potential reservoir of infection is large.

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