

# AIDS in a Hong Kong Chinese

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Since its initial description in 1981,<sup>1,2</sup> there have been reported about 7,000 patients with acquired immunodeficiency syndrome (AIDS) in the United States of America, about 600 in Europe and several thousands in Central Africa.<sup>3</sup> Recently, patients with AIDS have also been reported from South East Asian countries, e.g., Taiwan and Singapore. In this article, a Chinese male patient with fever of unknown origin is presented. It was not until 5 months after the onset of his illness that the diagnosis of AIDS was made.

## THE CASE

An otherwise healthy 32 years old man was admitted on 18.9.1984 into a hospital because of on-and-off fever with chills and rigors for 8 weeks. There was some mild cough with scanty whitish mucoid sputum. He was single and worked as a local tourist guide. He gave a history of syphilis which was treated in February, 1984. Physical examination revealed shotty cervical lymph nodes only. Initial laboratory investigations revealed an eosinophilia (29% of his 5,500/mm<sup>3</sup> WBC was eosinophils), mild thrombocytopenia

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**SUMMARY** A young Hong Kong Chinese male patient with fever of unknown origin is presented. The diagnosis of acquired immunodeficiency syndrome was made only 5 months after the onset of his illness. The lack of awareness of the syndrome might account for the delay in the diagnosis. The legal attitude towards homosexuality might have an adverse effect on epidemiological studies of AIDS in Hong Kong.

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of 84,000 and an elevated ESR of 66 mm/1st hour. "Sepsis work up" was negative. Bone marrow revealed mild nonspecific eosinophilic hyperplasia and cervical lymph node biopsy showed nonspecific reactive hyperplasia. A computerized axial tomography of abdomen showed no abnormality. He was given anti-tuberculosis treatment (INAH + ethambutol) despite a normal chest X-ray, but the fever did not respond. He discharged himself against medical advice on 10.10.1984.

After discharge, he took herbal medicine and claimed that he was well until about 5 weeks later when he had a recurrence of fever with a mild cough, for which he was readmitted on 14.12.84. Investigation this time revealed pancytopenia (Hb 10 gm/dl, WBC 3,300/mm<sup>3</sup>, platelet 33,000/mm<sup>3</sup>). Chest X-ray showed haziness in left lower zone and blood culture grew *Salmonella*, group DI. He was referred to this hospital for further management of a

suspected haemic malignancy.

After transfer, the patient was started on amoxycillin 6 gm per day in view of the blood culture result. A peripheral blood smear did not show any abnormal leucocytes and a repeated bone marrow biopsy showed a relative increase in plasma cells only. The fever did not respond to amoxycillin and another chest X-ray showed increasing pneumonitis over the left lower zone. On 26.12.84, he was started on anti-tuberculous treatment again (INAH, rifampicin, ethambutol and pyrizinamide) and the fever subsided abruptly one day after treatment. On 2.1.85 he was discharged home.

He was readmitted on 9.1.85 because of recurrence of the fever and a generalized maculopapular rash. He was diagnosed to be hypersensitive to antituberculosis drugs, which were all

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withdrawn and the fever subsided. On 13.1.85 INAH was reintroduced without side effects. On 16.1.85 rifampicin was reintroduced but the patient promptly developed high fever the next day. So the rifampicin was withdrawn. On 19.1.85 ethambutol was reintroduced and it was tolerated. On 19.1.85 pyrizinamide was added uneventfully. He was referred on 31.1.85 to another hospital for further treatment of the tuberculosis.

On 15.2.85, he was readmitted because of increasing pneumonic shadows on both lower lobes of the lungs despite the tuberculosis treatment. The patient himself was fairly well except for the fever and dry cough. Physical examination revealed shotty cervical lymph nodes and the presence of oral thrush. Bronchoscopy on 18.2.85 showed no endobronchial lesions but the transbronchial lung biopsy revealed the presence of *Pneumocystis carinii*. He was then given co-trimoxazole, 4 tablets tds. The patient developed increasing dysphagia and on 22.2.85 ketoconazole was added because of *Candida* oesophagitis. The clinical diagnosis of AIDS was made and he was transferred to the infectious disease hospital on 23.2.85. There he received another 2 weeks of cotrimoxazole. He remained afebrile and was discharged home on 20.3.85.

Further enquiry into his social history disclosed that he had been an exclusive homosexual for 6 years after arriving in Canada. He acted as both an active and passive partner. He returned to Hong Kong 2 years ago and since then he has been to Japan twice and the Philippines once, where he had further contacts. He claimed that he had few contacts in Hong Kong and denied any sexual contact since the onset of his illness.

Subsequent immunological study revealed that the OKT4/OKT8 ratio

was 0.15 (Normal range is 0.93-1.8). The absolute number of OKT4 cells was decreased to 49/mm<sup>3</sup>, as compared to the normal range of 541-1144/mm<sup>3</sup>. The HTLV III antibody was positive by both ELIZA and immunofluorescent methods.

### DISCUSSION

The clinical features of this patient satisfy the criteria for the diagnosis of AIDS as set out by the Center for Disease Control, Atlanta, USA.<sup>4</sup> Both *Candida* oesophagitis and *Pneumocystis carinii* pneumonia are infections well known to be indicative of an immune deficiency state. Yet the patient had no other condition associated with immune deficiency such as corticosteroid therapy or a disseminated malignancy. Being a homosexual, he fell into one of the 4 major risk groups for AIDS.<sup>5</sup> The reversed T4/T8 ratio with a decrease in absolute number of T4 cells is a characteristic immunological derangement in such patients.

In retrospect, had we been more aware of AIDS the diagnosis would have been suspected earlier. The general constitutional symptoms, the generalized lymphadenopathy and thrombocytopenia are all well known manifestations of what is now commonly referred to as pre-AIDS complex.

Homosexuality is still considered a criminal offence in Hong Kong. So our patient did not volunteer the fact that he was a homosexual. It was only months later that this fact was discovered and only after repeated direct questioning. This legal attitude towards homosexuality gives rise to difficulty in tracing the contacts of a homosexual, which is of importance in epidemiological studies on AIDS in our community.

The treatment of opportunistic infection in the context of AIDS may

be more difficult on two scores.<sup>6</sup> Firstly, the infection itself could be more resistant to standard treatment. Secondly the patients are more prone to develop hypersensitivity reactions to drugs. His reaction to rifampicin is an example of unusual proneness to develop drug reaction, a feature noted in some AIDS patients. Our patient fortunately tolerated the cotrimoxazole and his *P. carinii* pneumonia was treated rather successfully.

The distribution pattern of AIDS suggests that it is caused by an infective agent and it is now generally well accepted that HTLV III (otherwise known as lymphadenopathy virus or LAV) is the causative agent for this syndrome,<sup>7-10</sup> although other cofactors such as inhaled drugs, other infectious and sperm alloimmunization might play some role. The fact that this patient serum is positive for antibody against HTLV III strengthens the diagnosis of AIDS. However, it is noted that a minority of AIDS patients are seronegative for HTLV III.<sup>11,12</sup> So the diagnosis of AIDS should not be dismissed because of a sero-negative result if the clinical features are compatible.

This patient is the second patient with AIDS in Hong Kong. This being a cosmopolitan city, it is anticipated that more cases will be diagnosed in the near future. AIDS is not difficult to diagnose if one has a high index of suspicion and it should be considered a possibility in any patient from the high risk group who has fever of unknown origin and immunosuppression of no known cause.

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