## **TUBERCULOUS LYMPHADENITIS IN SINGAPORE**

## T H Tan, K K Tan

While the rate of pulmonary tuberculosis has been falling steadily in recent years, that of extrapulmonary tuberculosis has not shown a similar decline. In Singapore, besides tuberculous pleurispy, tuberculosis of the lymph nodes is the commonest form of extrapulmonary tuberculosis, consisting of about 50% of all forms of extrapulmonary tuberculosis notified (1).

The peak incidence of tuberculous lymphadenitis is in the second and third decade with a 2:1 female to male ratio (2). In Singapore, more than 80% of patients were under 45 years of age with a 1.7:1 female to male ratio. The reason for the female preponderence is not clearly understood.

Up to 65% of tuberculous lymphadenitis affected lymph nodes in the cervical region (3, 4, 5). This may be part of a generalised process, with lymphohaematogenous spread from pulmonary infection being responsible. Priel (4) noted that in 33 (35.1%) out of 94 patients, pulmonary tuberculosis was present at the time of diagnosis of tuberculous lymphadenitis, while other authors (6) reported little association with past or present history of pulmonary tuberculosis.

In recent years, mycobacterium tuberculosis was the common species responsible. However, atypical (non-tuberculous) mycobacterian in cervical nodes are being increasingly

Dept of T B Control Tan Tock Seng Hospital Moulmein Road Singapore 1130

T H Tan, MBBS (S), MRCP (UK), Head K K Tan, MBBS (S), MSc (PH) (S), Senior Registrar

Correspondence to Dr T H Tan

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reported, especially in children (7). Locally, positive bacteriology was only available in a quarter of cases and it is hoped that more biopsy material will be sent routinely for culture in future.

Chemotherapy is the cornerstone of treatment of tuberculosis of the lymph nodes. The basic principles that underlie the treatment of pulmonary tuberculosis also apply to extrapulmonary tuberculosis. Although there have not been the same kind of carefully conducted controlled trials of treatment for extrapulmonary tuberculosis as for pulmonary disease, increasing clinical experience seems to indicate that 9-month regimens are effective (8,9). The British Thoracic Society Research Committee (9) reported a controlled trial of 9 months versus 18 months' chemotherapy. The regimens consisted of Rifampicin plus Isoniazid for nine or 18 months. supplemented initially by Ethambutol for eight weeks. Progress during chemotherapy was uneventful in 74% of patients. The rest developed events like fresh nodes, increase in size of nodes, fluctuation of nodes and formation of sinus. These events, however, did not result in an unfavourable outcome. No relapse was recorded microbiologically 36 months after entry to the study. There were no advantages in the group of patients that had excision of lymph nodes. This report suggests that a 9 month regimen is adequate.

Amrane and co-workers (10) observed 8 (6.8%) failures in 141 patients treated wiht Rifampicin plus Isoniazid for 6 and 9 months, supplemented with Streptomycin and Pyrazinamide for the first two months.

Until long term follow-up results of controlled trials are available, the duration of chemotherapy for extrapulmonary tuberculosis will remain in question. However, a 9 month regimen with Rifampicin plus Isonazid, supplemented initially with Ethambutol or Pyrazinamide with or without Streptomycin for two months is probably adequate.

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