Scrofuloderma: A clinicopathological and epidemiological study

Sir,

Scrofuloderma (SCF) is a type of secondary tuberculosis (TB) from an endogenous source; it occurs by contiguous spread from tuberculous lymph nodes, bones, or joints.

Tuberculous lymphadenitis of the neck is also known as *scrofula,* a word derived from the Latin word *scrofa* — a brood sow, due to likeness of the cluster of nodes to piglets feeding from the sow.[1]

Thirty-eight patients with SCF attending the dermatology department of Rajah Muthiah Medical College Hospital, from 1991 to 1998, were evaluated clinically and by skin biopsy, Mantoux test, x-ray chest, hemogram, and serum biochemical investigations. Where indicated, fine needle aspiration cytology (FNAC) and lymph node biopsy were undertaken. Personal and socioeconomic data like smoking, diet habits, alcohol consumption, housing conditions, etc., were recorded.

Majority of cases presented with discharging sinuses overlying caseating tuberculous lymph nodes [Figure 1]. The lesions healed in one area, while new lesions developed elsewhere. There was a female preponderance [F:M = 2:1], most cases occurring in the second decade. The youngest was a 2½-year-old boy; while the oldest, an 88-year-old man. The youngest female was 8 years old; while the oldest, 70 years, overall mean age being 31 years. Cervical nodes were most commonly involved (76.3%), followed by inguinal (28.9%), axillary (28.9%), and submandibular groups (10.5%) [Figure 2]. Among cervical nodes, bilateral involvement was seen in 30% of the cases, upper deep cervical group being the most common site. The time interval between onset of disease and seeking treatment varied from 1 month to 30 years, with an average of 1 year 9 months.

Four cases of coexistent pulmonary tuberculosis (PT) (4 patients, 10.5%), 1 of these with TB laryngitis, hilar

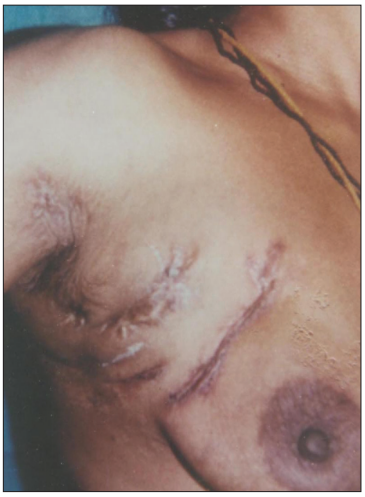

Figure 2: Scars and sinuses in the left axilla

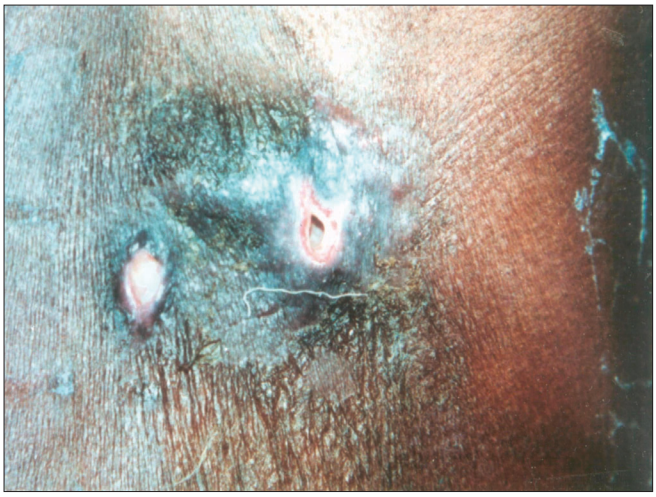

Figure 1: Scrofuloderma — discharging sinuses in the left axilla

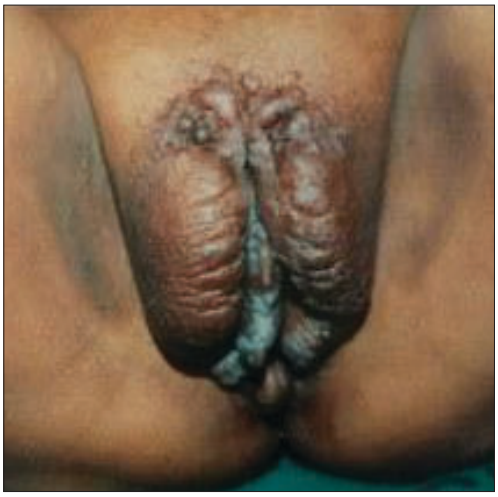

Figure 3: Elephantiasis of the external genitalia

lymphadenitis, and bronchitis (7.9%); elephantiasis of external genitalia and lymphedema (2 women) [Figure 3]; and 1 case each with tuberculous synovitis of right thumb, lepromatous leprosy, protein energy malnutrition (PEM), tuberculous synovitis, and tuberculous abdomen were also seen.

In India, the commonest type of cutaneous tuberculosis is lupus vulgaris, followed by scrofuloderma, according to different workers,[2-4] though the highest incidence of scrofuloderma, followed by lupus vulgaris and tuberculosis verrucosa cutis (TBVC) has been reported by other authors.[5,6]

The average number of persons in each household was 8, available floor area per person ranging from 30 to 50 sq ft, against the recommended minimum of 50-100 sq ft, indicating overcrowding. The average monthly income of our patients was Rs. 750/-, which concurs with reported association of cutaneous tuberculosis, overcrowding, and low socioeconomic status.[2] The presence of contact with an open case of PT may be relevant. In the present study, a positive history of contact could be obtained in 6 (15.8%) patients.

Involvement of upper deep cervical lymph nodes in a very high proportion of patients, as seen in the present study, indicates the importance of nasopharynx as a portal of entry for the tubercle bacilli.[2] Thirteen patients in the present series had multiple sites of involvement, as reported by others.[2,6-8]

Majority of the SCF patients usually seek treatment earlier, probably due to the disfiguring ulcers and sinuses. Most of our patients sought medical help within 1 month of illness; while the longest interval was 30 years, the average interval was 1 year and 9 months.

Though diabetes and tuberculosis are called 'sister diseases' and tuberculosis and HIV are poetically termed the 'cursed duet,' no such association was noted in the present series.

Only 11 (28.9%) patients received BCG vaccination, while Mantoux test was positive in 24 (82.8%) patients. No correlation was found between the positivity rate, extent of the disease, or previous vaccination, which was similar to other reports.[4]

Biopsy revealed typical tuberculous pathology in 30 (88.2%) patients. In 8 cases biopsy showed non-specific features like granulation tissue with acute inflammatory infiltrate and scattered epithelioid cells with no evidence of well formed granulomas. Diagnostic importance was given to the clinical features and therapeutic response, as documented by other workers.[4]

Concerted attempts at improving the socioeconomic status, creating awareness about health and hygiene among the population, and provision of primary medical care facilities in developing countries will go a long way in the eradication of tuberculosis, 'the king of diseases'.

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