

**CASE REPORT**

## Multicentric Lupus Vulgaris

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**Abstract**

A eight year old girl presented multiple plaques of lupus vulgaris, numerous papules of lichen scrofulosorum and involvement of right ulnar bone. The patient responded to antituberculosis therapy. The multiple foci were probably due to hematogenous dissemination

**Key Words**

Multicentric, Lupus vulgaris, Lichen Scrofulosorum

**Introduction**

Tuberculosis is a global health problem. Cutaneous tuberculosis is a variety of extrapulmonary tuberculosis which constitutes about 10% of all cases of tuberculosis. It can present with unusual clinical and histopathological features causing delay in diagnosis (1). Cutaneous tuberculosis is now rarely encountered in western countries, but it is still the major health problem in India. It can present in different morphological forms depending upon the route of infection and the immunological status of the host. In India, scrofuloderma is the most common form of skin tuberculosis in childhood, whereas lupus vulgaris is the commonest form in adults (2). The lesions are usually solitary, but two or more sites may be involved simultaneously and multiple foci may arise by hematogenous dissemination (3). Disseminated forms of lupus vulgaris are not uncommon (4). We are reporting a case of multicentric lupus vulgaris who also had lichen scrofulosorum and involvement of right ulnar bone, which is an unusual presentation.

**Case Report**

A seven year old undernourished female presented with multiple asymptomatic reddish brown plaques and painful swelling with deformity of right elbow of 4 years and 6 months duration respectively. She gave history of incomplete healing at the site of BCG vaccination and development of small erythematous plaque at that area after 3 years of vaccination. There was history of low grade fever with malaise and weight loss, however there

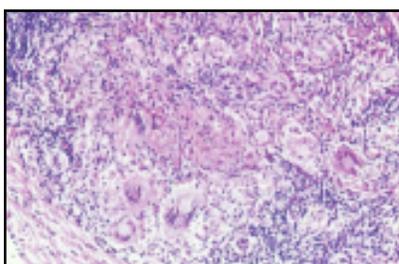
was no history of chronic cough and hemoptysis. On clinical examination she was found to be emaciated, anaemic and her body weight was 15 kg. Systemic examination revealed her lungs to be clear but there was soft, non tender mild hepatomegaly and spleen was palpable upto 4 cm below the costal margin. Cutaneous examination revealed multiple polysized, reddish brown plaques over left shoulder, back, right side of face and upper chest. Each plaque showed irregular raised erythematous scaly margins and central atrophy (*Fig1*). Numerous small lichenoid papules of lichen scrofulosorum showing grouping and crusting at places were also noted over trunk and limbs of the case. Right elbow joint was grossly swollen, tender and its movements were restricted. She also had cervical and axillary lymphadenopathy with discrete and slightly tender lymph nodes. Laboratory investigations showed raised ESR (30mm), low haemoglobin (8.0 g%) and positive mantoux test (20 mm). Skiagram of chest was normal and that of right elbow showed lytic lesion at olecranon process of ulna (*Fig-2*). Histopathological examination of biopsy from skin plaque showed typical tuberculoid granulomas in the dermis (*Fig-3*). FNAC smears from lymph nodes showed non-specific reactive features. However blood sugar, sputum for AFB, LFT including serum enzymes were within normal limits. Blood sent for HIV was found to be negative. Liver biopsy was not carried out in this patient. She was diagnosed as a case of disseminated

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**Fig-1 Multiple Plaques of Lupus Vulgaris**



**Fig.3 Photomicrograph Showing Tuberculoid Granuloma**

tuberculosis with multicentric lupus vulgaris and treated with antitubercular drugs. Response of skin as well as bony lesions to antituberculosis therapy was excellent.

**Discussion**

Lupus vulgaris is post primary, progressive and chronic form of skin tuberculosis occurring in individuals with moderate immunity. It originates by hematogenous, lymphatic or contiguous spread from tuberculosis elsewhere in the body and rarely it can arise at the site of a primary inoculation or at the site of BCG vaccination.(5). Lupus vulgaris usually occurs singly on the face or neck, while in Indian children it is commonly reported on the leg & buttock (6).The high incidence of Lupus vulgaris on the legs had been explained by reinoculation of TB bacilli through minor trauma or infection especially during squatting (7). In patients with active pulmonary tuberculosis, multiple foci may develop. Lichen scrofulosorum, an uncommon disorder, first recognized by Von Hebra, is ascribed to hematogenous spread of mycobacteria in an individual sensitive to mycobacteria tuberculosis and usually associated with chronic tuberculous disease of lymph nodes and bones, but rare in phthisic patient (8)..Special feature in our case was the presence of multiple lesions of lupus vulgaris and lichen scrofulosorum along with involvement of right ulnar bone. Also, initial lesion of lupus vulgaris developed at the



**Fig -2: Skiagram Showing Lytic Lesion Involving Olecranon Process of Right Ulna**

site of BCG inoculation. Multiplicity of the skin lesions and systemic involvement of bone in this case may be because of her poor health and hematogenous dissemination.

**Conclusion**

Association of systemic tuberculosis with lupus vulgaris as observed in our case highlights the importance of the systemic examination in all the cases of cutaneous tuberculosis.

**References**

1. Wann AP, Wilson Jones E. Cutaneous tuberculosis of nose with unusual clinical and histological features leading to delay in diagnosis. *Clinical Exp Dermatol* 1977; 2:235-42
2. Kumar B, Rai R, Kaur I, et al. Childhood cutaneous tuberculosis: a study over 25 years from northern India. *Int J Dermatol* 2001; 40:26-32.
3. Ramachandra S, Chawla RK, et al. Multicentric lupus vulgaris. *Ind J Dermatol Venereol Leprol* 1995;61:168-69.
4. Prasad PVS, Padmavathy L, Prasanna Kumar, et al. Lupus vulgaris with verrucosa. *Ind J Dermatol Venereal Leprol* 1994;60:347-48.
5. Sasmaz R, Altinyazar HC, Tatlican S, et al. Recurrent lupus vulgaris following repeated BCG vaccination. *J Dermatol* 2001;28:762-64.
6. Sethuraman G, Ramesh V, Ramam M, Sharma UK. Skin tuberculosis in children: Learning From India. *Dermatol Clin* 2008 ;26: 285-94
7. Padamarathy L, Raa LL. Lupus Vulgaris. *Ind J Dermatol Venereol Leprol* 2005;71:134-35.
8. Tappeiner G, Wolff K. Tuberculosis and other Mycobacterial infections. In:Freedberg IM, Eisen AZ, Wolff K, Austen KF, Goldsmith LA, Katz SI (eds). *Fitzpatrick,s Dermatology in General Medicine*, 6th edn:USA. McGraw-Hill.2003,pp.1933-50.