RESEARCH PAPER.

LUPUS VULGARIS -ATYPICAL HISTOLOGY AND PLACE FOR TRIAL OF ANTI TB THERAPY

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60-year-old lady presented with chronic non healing ulcer of the left arm for 1 year and 3 months duration. She had received treatment for cutaneous leishmaniasis and atypical mycobacterial infection with a poor response. The ulcer started spontaneously and gradually increased in size. It was painless and no purulent discharge was present. Patient had mild dry cough and loss of appetite and loss of weight. She had no history or contact history of tuberculosis. No arthralgia, red eyes or other skin eruptions noted. No recurrent upper respiratory symptoms, oral/nasal ulcers or frothy urea/haematuria. Her systemic review and past medical history were unremarkable. Examination revealed well defined pinkish indurated plaque measuring 15x10 cm size with multiple shallow ulcers with granulation tissue and purulent exudate. No rolled, everted, indurated violaceous overhanging edges present. No cutaneous manifestations of tuberculosis, sarcoidosis, connective tissue diseases or systemic vasculitis were noted. She was thinly built but rest of the general and systemic examination findings were unremarkable. Skin biopsies were compatible with granulomatous inflammation with few foci of necrosis. No central caseation was noted and epithelioid granulomas had a lymphocytic cuff. No vasculitis was noted in the histology. All special stains were negative including ziehl-neelsen, PAS, Grocott, gram stains. Tissue cultures were negative for bacteria, mycobacteria, fungi and leishmaniasis. Tissue biopsy for mycobacterial PCR was negative. Moreover, sputum AFB x3, and TB Quanti FERON gold test were negative. Haematological, biochemical and imaging studies were arranged in order to evaluate for possible differential diagnosis such as Tuberculosis, Atypical mycobacterial infections, Sarcoidosis,

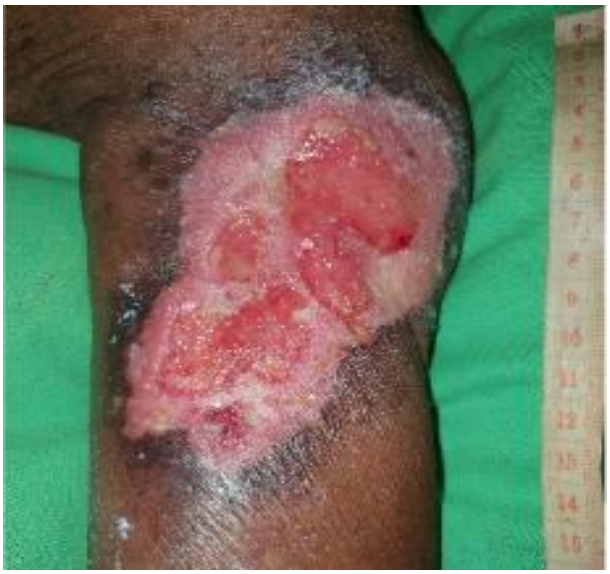

Figure 1: Pre treatment Lupus Vulgaris

Wegener's granulomatosis, Granulomatous PG. CXR and HRCT findings were compatible with left lower lobe bronchiectasis, bronchoscopy findings were compatible with pulmonary tuberculosis. She had positive PCR for TB in

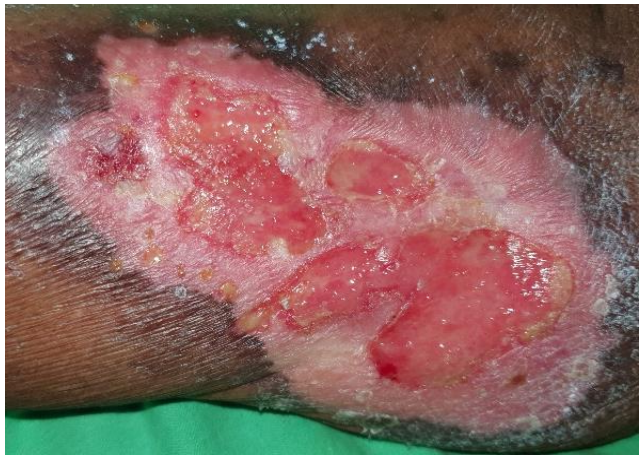

Figure 2: Pre treatment Lupus Vulgaris

BAL. serum ACE levels, serum Ca2+, ANCA, ANA, RF levels were normal. With above investigation findings lupus vulgaris with associated pulmonary TB was diagnosed and patient was started on anti TB treatment.

In this patient, initial evaluation for tuberculosis were repeatedly negative however she was found to have positive PCR testing for mycobacterium tuberculosis in BAL, 1 year and 5 months after the onset of the ulceration. Poor response to treatment for atypical mycobacterial infection prompted us to arrange repeated evaluation for possible alternative diagnosis. This case highlighted the importance of repeated evaluation in patients with atypical clinical presentations. Absence of typical caseating necrosis in the histology favoured atypical mycobacterial infection over lupus vulgaris but with additional reading it was found out that ulcerative lupus vulgaris may have granulomatous inflammation without caseation.

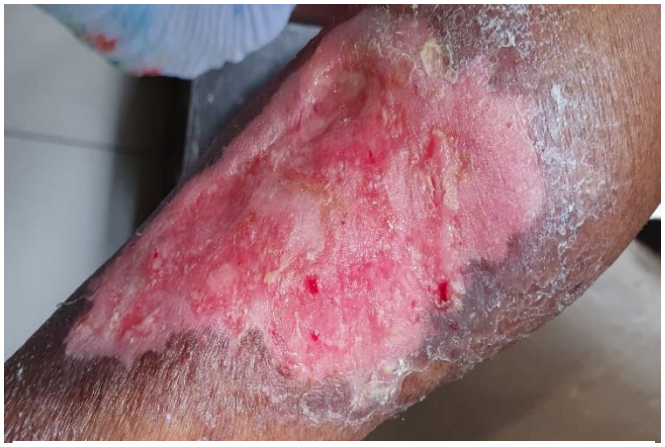

Figure 3: Response after 2 months of anti TB treatment.

Infections caused by mycobacterium species are not limited to pulmonary tuberculosis. Pulmonary TB is caused by M. kansasil and M. kbscessus. M. maximum and M. ulcerans create skin soft tissue tuberculosis and lymph node tuberculosis is caused by M. grofulaccum, M. chelonac and M. farteinum. Disseminated tuberculosis infections are caused by M. cholonal M. fartuinum and M. kansasis species. Lupus vulgaris can be caused by direct inoculation of tuberculosis and BCG vaccination based inoculation(1).

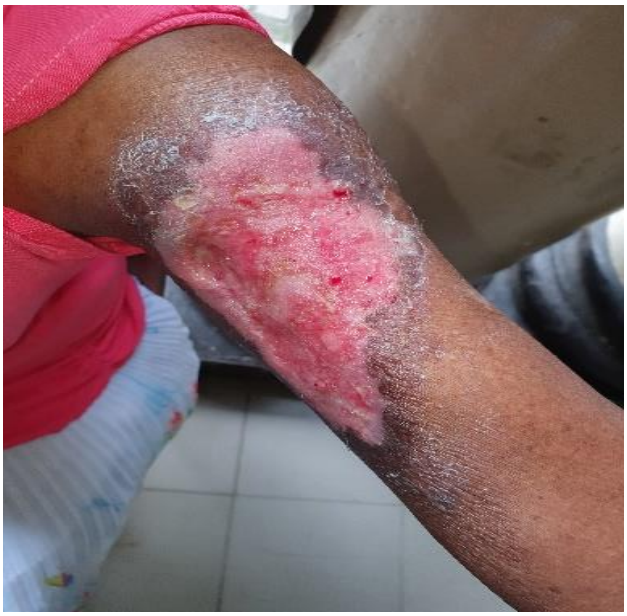

Figure 4: Response after 2 months of anti TB treatment.

In tropical countries such as Sri Lanka, it is possible to expect a higher tendency of occurring Lupus vulgaris(2,3) On the other hand, Sri Lanka Sri Lanka is considered as a country which achieves nearly 100% of BCG immunization coverage(4). Therefore, it is possible to expect a higher prevalence of mycobacterium-based Lupus vulgaris(5). But there are minimum number of reported incidences(6,7). Therefore, it is required to integrate an early detection screening methodology to the health system.

Due to delays in diagnosis, it is possible to occur lupus vulgaris and several morbidities based on Mycobacterium Tuberculosis, which appeared to be an unwanted burden to both the patient and the health system.

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