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Lupus Vulgaris in Gluteal Region: A Rare Presentation in a Female Patient

*Sarker S[1], Jahan S[2], Paul A[3], Islam N[4], Nila SR[5]

Abstract

Lupus vulgaris is the most common type of cutaneous tuberculosis in adults with most varied manifestation. A characteristic feature of lupus vulgaris is its extremely chronic course with slow but steady growth of the lesions over a period of many years, even decades. Head and neck are the sites commonly affected in European countries. However, in Indian subcontinent, the buttocks, thighs, and legs are the common sites of involvement. A 36-year-old woman presented with large single plaque of 5 weeks duration over left buttock. The lesion was asymptomatic except for mild pain. Histopathologic examination revealed well defined epithelioid granulomas, some multinucleated giant cells including Langhans type of giant cells. Mantoux test was strongly positive with well-defined induration. This case is being reported because of its rarity and acute presentation.

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Introduction

Cutaneous tuberculosis comprises only a small proportion of all cases of tuberculosis, nevertheless considering the high prevalence of tuberculosis in many developing countries these numbers have been significant.[1] Study in India report an incidence of 0.1% of all cases of extrapulmonary tuberculosis.[2] Lupus vulgaris is most common type of cutaneous tuberculosis with most varied manifestation.[3] A characteristic feature of lupus vulgaris is its extremely chronic course with slow but steady growth of the lesions over a period of many years, even decades. Head and neck are the sites commonly affected in European countries. In India, the buttocks, thighs, and legs are the common sites of involvement.[1] Here we report a rare case of lupus vulgaris in gluteal region of a female patient.

Case Presentation

A 36-year-old woman presented with a single large plaque of 5-week duration over left buttock. The lesion started as a small papule and constantly grew on size. The lesion was asymptomatic except for mild pain. There was no history of trauma prior to the onset of the lesions or the past history suggestive of tuberculosis of any part of the body. There was no family history of tuberculosis or contact with tuberculosis patient. She consulted many doctors and applied various creams, but they were of no help. On examination, there was single ill-defined plaque in left buttock measuring about 10cm×9cm.

1. *Dr. Susthir Sarker, Assistant Professor, Department of Dermatology & Venerology, Community Based Medical College Bangladesh.
2. Dr. Shahanaz Jahan, Associate Professor, Department of Pathology, Community Based Medical College Bangladesh.
3. Dr. Anindita Paul, Lecturer, Microbiology, Shahid Syed Nazrul Islam Medical College, Kishoreganj.
4. Dr. Nahida Islam, Associate Professor, Department of Dermatology & Venereology, Community Based Medical College Bangladesh.
5. Dr. Sadia Rubana Nila, Registrar, Department of Dermatology & Venereology, Community Based Medical College Bangladesh.

Address of Correspondence:
Email: susthir32@gmail.com

Within the plaque there was central scarring with hyperkeratosis on the edges, scarring was present between the edges and the center (Fig. 1). The plaque was non tender on palpation. There was no regional or generalized lymphadenopathy. Systemic examination was normal.

Fig. 1: Ill-defined plaque with central scarring with hyperkeratosis on the edges at left gluteal region.

Hematological investigation revealed anemia (Hb%: 10.2 g/dl), ESR was slightly raised (46 mm in 1st hour). The Mantoux test was strongly positive with 22 mm × 20 mm induration in 72 hours. Chest x-ray was normal and x-ray of affected gluteal area showed no evidence of underlying tissue infiltration (Fig. 2). Sputum was tested and found negative for acid fast bacillus. Scrapings from the crust was negative for fungus. Histopathologic examination revealed well defined epithelioid granulomas, some multinucleated giant cells including Langhans type of giant cells and fragments of fibrocartilaginous tissue (Fig. 3). However, no fungal elements or AFB was seen on smear cytology. Based on clinical features and investigations, the patient was diagnosed as a case of lupus vulgaris and given DOTS therapy based on Anti-TB treatment category 1. There was dramatic improvement in the lesion as observed in follow-up visits after 2 months and a total healing was found after 6 months (Fig. 4A & 4B).

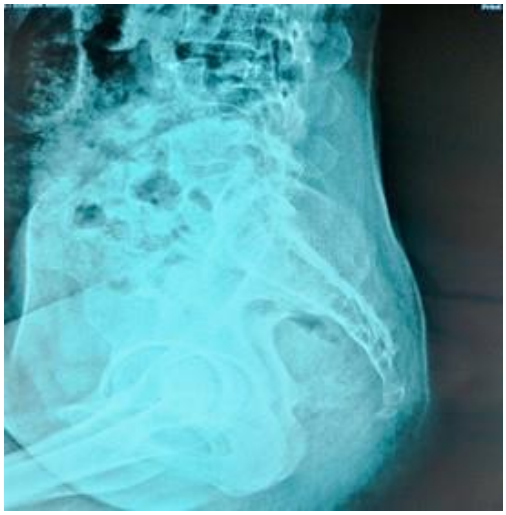

Fig. 2: X-ray of pelvis showing no bony infiltration

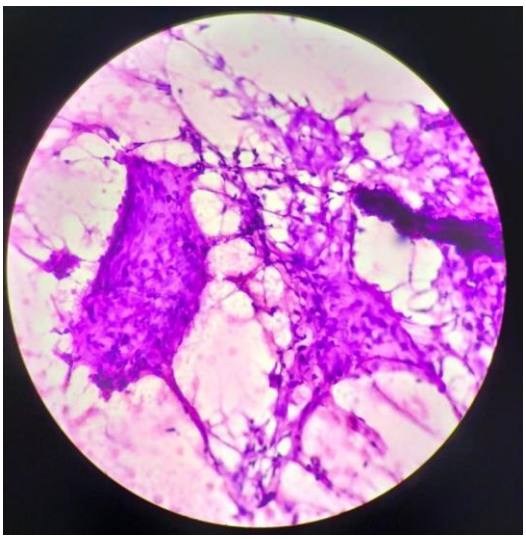

Fig. 3: Histopatholgical examination revealed well defined epitheliod granulomas, multinucleated giant cells including Langhans type of giant cells.

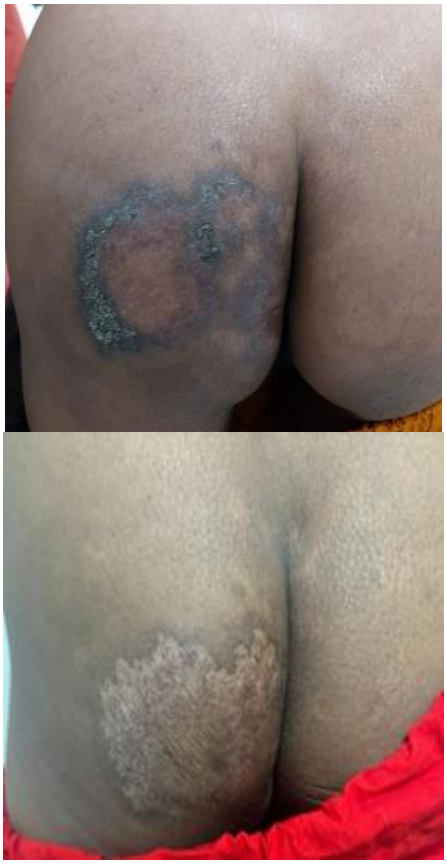

Fig. 4: A) Lesion improved after 2 months (Up) and B) Complete resolution of the lesion after 6 months (down) following Anti-TB therapy

Discussion

Lupus vulgaris (LV) is a chronic form of cutaneous tuberculosis that arises in persons previously infected elsewhere with Mycobacterium tuberculosis. In rare instances LV has been reported after primary inoculation or BCG vaccination but contagious, lymphatic, or hematogenous spread from a tuberculous lesion or clinically inapparent tuberculous focus, has been proposed as usual pathogenic mechanism.[4] Soft tissue tuberculosis extending from adjacent bone or joint are not uncommon. However, primary tuberculous pyomyositis, bursitis and tenosynovitis are rare entities constituting 1% of skeletal tuberculosis.[5] X-ray of the affected area was done to exclude the bony involvement in our patient.

FNAC and cell block technique are now a routine diagnostic tool for many soft tissue lesions.[6] The histological features are variable, normally, tubercles with scanty or absent central caseation, surrounded by epithelioid histiocytes and multinucleated giant cells, are present in superficial dermis. Peripheral lymphocytes are often prominent. Occasionally, tubercule bacilli may be numerous.[1] The Mantoux test is positive in most of cases of LV; hence, a negative reaction provides strong evidence against tuberculosis.[6-8] Culture can be negative in a significant number of cases of lupus vulgaris.[9,10] The differential diagnoses to be considered in the early stages are leprosy, sarcoidoisis, lymphocytoma, spitz naevus and lupus erythematosus and in older patients, syphilis must be excluded. The histopathologic and culture reports help to differentiate lupus vulgaris from the deep mycoses, which closely resemble the vegetating and crusted type.[11] A standard four drug anti-tuberculosis therapy must be given in histopathologically confirmed cases for six months. A therapeutic trial of triple anti-tuberculosis therapy: Isoniazid, rifampicin and pyrazinamide may be considered in cases where the diagnosis is difficult. A clinical response would be expected within 4 to 6 weeks.[12] Similar findings were observed in gluteal region by Bilen *et al.* in two cases[13], which are in congruence with our case.

Conclusion

Lupus Vulgaris is common in middle aged patients and can present a plaque type lesion on the extremities such as gluteal regions. Diagnosis is based on clinical and histopathologic

examination. Anti-tubercular regimen is the mainstay of treatment.

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