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CASE REPORT

Tuberculosis Verrucosa Cutis in an Unusual Site

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Abstract

Tuberculosis Verrucosa Cutis, a verrucous form of cutaneous tuberculosis which occurs from an exogenous inoculation of tubercle bacilli into the skin.It occurs in patients who have been previously sensitized.We report a rare case of a patient who developed tuberculosis verrucosa cutis in his perianal region.This has only been presented once in the previous literature.

Key Words

Cutaneous Tuberculosis,Tuberculosis Verrucosa Cutis,Warty Tuberculosis

Introduction

Cutaneous tuberculosis comprises 1 to 2% of all TB cases. [1] Tuberculosis verrucosa cutis is caused by Mycobacterium tuberculosis .Tuberculosis verrucosa cutis was first described by Rene Laennec in 1826.It was termed verruca necrogenica by Wilks and Poland in 1862.Most cases of TBVC are due to accidental exogenous inoculation of M. tuberculosis in previously infected or sensitized individuals with moderate to high degree of cell mediated immunity.It is predominantly seen in children and shows a male preponderance (M:F ratio 2:1). [2] It occurs predominantly in the extremities and manifests as painless violaceous or brownish warty plaque-like lesions. [1]

Case Report

30 year old unmarried male patient presented with complaints of painless raised skin lesions in the perianal region associated with pus discharge since 2 months. The lesions began as small nodules and progressed to form a plaque on either side of the buttock. Patient denied any history of exposure to the risk of acquiring sexually transmitted infections. At the time of presentation, he did not have any cough, evening rise of temperature, night sweats, loss of appetite or weight. There was past history of treatment taken for tuberculosis, eight years back. He had undergone fistulectomy at the site of the lesion, ten years back. Dermatological examination revealed multiple, skin-colored, soft to firm plaques and nodules with a smooth surface arranged in an irregular fashion with coarse grooves separating each of them and being 7cm to 10 cm X 4cm to 6cm in their vertical and horizontal extent respectively on either side of the gluteal cleft.(*Fig 1*).Purulent discharge was noted on gentle pressure. There was no pain or bleeding on manipulation. Probe sign was negative. No scars were seen over the penis. Regional (inguinal) lymph nodes were not palpable. Clinical differential diagnoses considered were cutaneous tuberculosis namely TBVC and lupus vulgaris , sarcoidosis, condyloma accuminata, deep fungal infections and verrucous carcinoma. Histopathology showed skin with hyperkeratosis, parakeratosis and acanthosis ,dermis showed increase in cellularity of lymphocytes, plasma cells, few neutrophils and foamy histiocytes along with granulomas composed of epithelioid cells and Langhans giant cells (*Fig 2*).Routine investigations showed Hb-7.8 gm,RBC-3.2 cu.mm,TLC=5370cu.mm,Neutrophils-76.2%,Lymphocytes-16.2% Eosinophils-0.6%.Sputum for Acid fast bacilli (AFB) and HIV serostatus were negative. GeneXpert was positive for rifampicin sensitive

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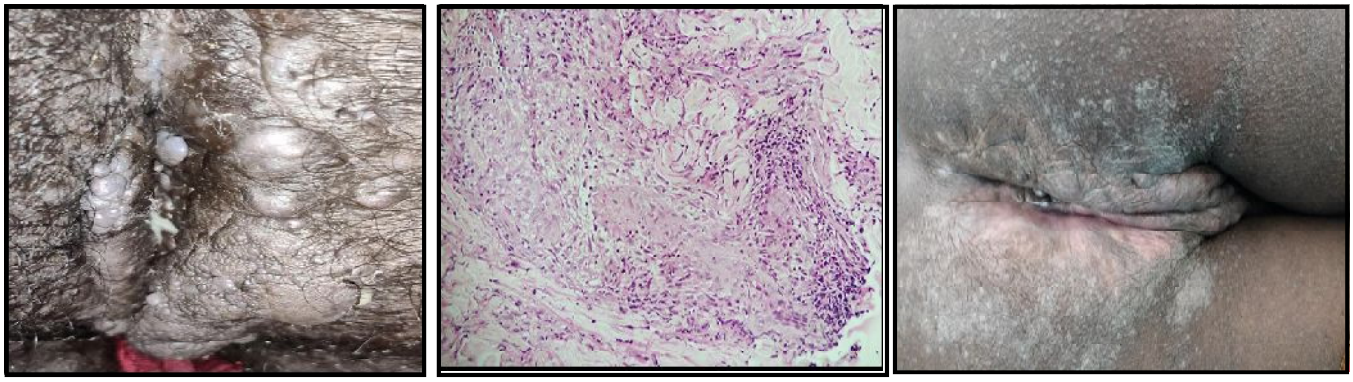

Fig 1-3. Multiple Plaques and Nodules Around the Perianal Region. Granulomas Composed of Epithelioid cells and Langhans Giant Cells and Post Treatment with ATT

Mycobacterium tuberculosis.X-ray chest and HRCT showed Left lung empyema ,loculated pleural effusion and thickened pleura further substantiating the evidence. Pleural biopsy showed chronic granulomatous inflammation.Colonoscopy was done which did not show any pathology.MRI fistulogram was done which showed intersphincteric fistula.Decortication of Left lung was done .The lesions flattened out after treatment (*Fig 3*) with Category II antituberculous treatment (ATT) (Isoniazid ,Rifampicin ,Pyrazinamide and Ethabutol) for 3 months along with Streptomycin for first 2 months in intensive phase followed by continuation phase (Isoniazid,Rifampicin and Ethambutol) for 5months.

Discussion

Tuberculosis verrucosa cutis also known as warty tuberculosis,prosectors wart,verruca necrogenica or anatomist wart, lupus verrucosa,post-mortem wart, anatomical tubercle, cadaver wart and tuberculosis cutis verrucosa.Current prevalence of cutaneous tuberculosis in India is 0.7% . [3] TBVC is the most common form of cutaneous TB infection in Asia.The lesions occur on areas exposed to trauma.The hands are affected in Western population while lesions on buttocks,ankle and legs are common in the Eastern population.[4,5] Rarely inoculation of patients own sputum can cause the disease.[6] The lesion begins as a solitary indurated nodule with a verrucous surface and evolves into a irregular reddish-brown warty plaque. Occasionally, it may be soft in the centre and may exude pus and keratinous material.[1] Other presentations include psoarisiform, keloidal, sclerotic, papillomatous, tumor-like and granulomatous forms.[7] Combination of different types of cutaneous TB has also been reported.Multifocal tuberculosis verrucosa cutis has also been reported.[8] Pulmonary Tuberculosis can coexist with TBVC. [9]

Histopathology of the lesion shows variable degrees of epidermal hyperplasia,papillomatosis.The papillary and reticular dermis demonstrate epitheloid granuloma and mixed infiltrate.Rarely few bacilli are seen.In similar cases with strong clinical suspicion but negative laboratory tests, the response to ATT is of considerable diagnostic value. [3] Cryotherapy may also be performed to debulk hypertrophic lesions.

In our case the unusual site of presentation posed a diagnostic dilemma however with a positive GeneXpert result and histopathology ,the diagnosis was confirmed.

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