ORIGINAL RESEARCH PAPER

General Surgery

A MOULD IN A FOLD GROWING OLD! AN UNUSUAL CO-EXISTENCE OF SCROFULODERMA HARBORING ASPERGILLOMA

KEY WORDS: Cutaneous Tuberculosis; Scrofuloderma; Aspergilloma; Co-Infection; Chronic Discharging Sinus; Mycobacterium Tuberculosis; Fungal Superinfection

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ABSTRACT

Background: Cutaneous tuberculosis is rare, accounting for about 1–1.5% of all tuberculosis cases. Scrofuloderma, a common form of cutaneous TB, occurs due to direct extension of underlying tuberculous lymphadenitis or bone infection. **Case Presentation:** We describe a middle-aged man who presented with a long-standing, progressively enlarging lesion over the right gluteal region with multiple discharging sinuses for over 20 years. Clinical examination revealed a nodular, hyperpigmented lesion with active discharge. Tissue biopsy and CBNAAT confirmed Mycobacterium tuberculosis, establishing scrofuloderma. However, histopathology also revealed fungal elements consistent with Aspergillus, indicating a rare co-existence of scrofuloderma with aspergilloma. **Conclusion:** Dual infection with Mycobacterium tuberculosis and Aspergillus in cutaneous lesions is extremely uncommon and poses diagnostic and therapeutic challenges. Awareness of such atypical presentations is important in endemic regions.

INTRODUCTION

Cutaneous tuberculosis is an uncommon manifestation of tuberculosis, representing approximately 1–1.5% of all TB cases. The clinical presentation varies widely depending on the host immune status and route of infection. Scrofuloderma is one of the more frequent forms of cutaneous TB and results from direct extension of tuberculous infection from underlying lymph nodes, bones, or joints to the skin surface. It typically presents as nodules that ulcerate to form discharging sinuses.

Aspergillosis is a fungal infection caused by Aspergillus species, commonly affecting immunocompromised patients or those with chronic lung disease. Cutaneous involvement is rare and may occur through direct inoculation in chronically inflamed or previously infected tissues.

The coexistence of scrofuloderma with aspergilloma in the same lesion is exceptionally rare. This case highlights an unusual dual infection that complicated the diagnosis and management.

CASE STUDY

MATERIALS AND METHODS

This is a descriptive case report based on clinical evaluation, laboratory investigations, histopathology, and treatment outcomes of a middle-aged male patient presenting to our dermatology and surgery departments.

Clinical Presentation

The patient reported a gradually progressive lesion over the right gluteal region for more than 20 years. The lesion showed multiple discharging sinuses with intermittent seropurulent discharge.

Physical Examination

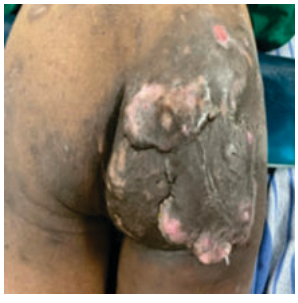
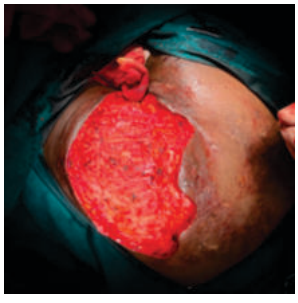
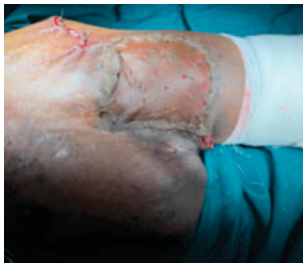
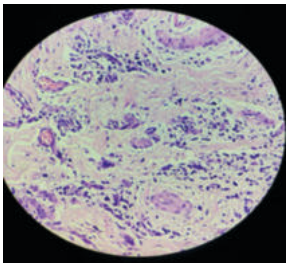
A nodular, hyperpigmented, indurated lesion measuring approximately 30 cm × 15 cm with multiple sinus tracts and foul-smelling discharge was observed over the right gluteal region.

Investigations

- Tissue biopsy: Granulomatous inflammation consistent with tuberculosis.
- CBNAAT: Positive for Mycobacterium tuberculosis.
- AFB stain/culture: Positive.
- Fungal stain and culture: Demonstrated Aspergillus species.
- Imaging was performed to rule out deeper extension and systemic involvement.

Treatment

- First-line antitubercular therapy (ATT) was initiated after confirmation.
- Following identification of fungal elements, oral itraconazole was added.
- Patient showed reduction in discharge and improvement of lesion thickness after initiation of dual therapy.
- Surgical debridement was deferred initially due to active inflammation.
- The patient is on regular follow-up and showing progressive improvement.

DISCUSSION

Cutaneous tuberculosis can present in numerous forms, with scrofuloderma being one of the more common in endemic zones. It usually arises from direct extension of underlying tuberculous foci. Long-standing, neglected lesions may develop extensive sinus tracts and become secondarily infected.

In this case, the chronicity of the lesion and immuno-compromised microenvironment likely predisposed the area to opportunistic fungal colonization by Aspergillus species. Superimposed fungal infection on a tuberculous lesion is exceedingly rare and complicates both diagnosis and management.

The absence of systemic TB symptoms and a long clinical

course delayed the suspicion of tuberculosis. The identification of fungal elements raised the possibility of co-infection rather than contamination, especially given the chronic ulcerated nature of the lesion.

Dual Infection Creates a Diagnostic Dilemma:

- TB lesions may mask fungal infection.
- Persistent non-responsive lesions may indicate a secondary infection.
- Treatment requires addressing both pathogens to prevent recurrence.

This case underscores the need to consider atypical etiologies in chronic, non-healing cutaneous lesions, particularly in TB-endemic regions.

CONCLUSION

Cutaneous tuberculosis is often under-recognized, especially when complicated by atypical presentations or super-imposed infections. This case highlights the rare co-existence of scrofuloderma and aspergilloma, emphasizing the importance of thorough investigation in chronic discharging lesions. Clinicians should maintain a high index of suspicion for dual pathology when lesions do not respond to conventional therapy. Early diagnosis and combined treatment significantly improve outcomes.

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