

EUROPEAN JOURNAL OF PHARMACEUTICAL AND MEDICAL RESEARCH

www.ejpmr.com

Case Study ISSN 2394-3211 EJPMR

LYMPHOCUTANEOUS SPOROTRICHOSIS: THE OTHER GREAT MIMICKER

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Article Received on 09/09/2021

Article Revised on 29/09/2021

Article Accepted on 19/10/2021

ABSTRACT

Sporotrichosis is a cutaneous mycosis caused by a dimorphic fungus, Sporothrix schenckii species complex clinically presenting as lymphocutaneous, fixed, or disseminated forms, Beside sarcoidosis & secondary syphilis, sporotrichosis may be considered as one of the great imitator. We present a case of 48-year-old female from a rural background who presented with a large warty lesion with minimal purulent discharge on arm since one month. It was non-tender, well-defined, erythematous, papulo-plaques over the arm along the lymphatics mimicking various dermatosis. The variations in the cutaneous findings of lymphocutaneous sporotrichosis can cause confusion in following a clinical course and therapeutic management.

KEYWORDS: Itraconazole, lymphocutaneous, sporotrichosis, verrucous.

INTRODUCTION

Sporotrichosis is a chronic granulomatous subcutaneous mycotic infection caused by dimorphic fungus Sporothrix schenckii species complex, a common saprophyte of soil, sphagnum moss, and plant detritus. The disease is endemic in regions with a tropical or subtropical climate and among personnel involved in agriculture or handling of plant material. After traumatic implantation of the pathogen into the skin, the disease develops as fixed cutaneous, lymphocutaneous, or disseminated cutaneous sporotrichosis mainly involving extremities in its classic forms. Lymphocutaneous sporotrichosis is the most common form accounting for a majority cases where diagnosis is fairly easy. [1]

Arm involvement occurs in fixed cutaneous variety and among childhood cases. Clinically, the lesions are usually asymptomatic, erythematous, papules or papulopustules, nodules with or without ulceration, non-healing ulcers, or small abscesses. Rarely, lesions of verrucous morphology are seen, especially in long-standing cutaneous sporotrichosis. [2] This poses a diagnostic dilemma particularly in nonendemic regions or where cutaneous tuberculosis is prevalent leading to a misdiagnosis as tuberculosis verrucosa cutis (TBVC) or hypertrophic lesions of lupus vulgaris. Verrucous lesions of cutaneous sporotrichosis are also difficult to differentiate clinically from those

chromoblastomycosis, blastomycosis, cutaneous leishmaniasis, or viral warts. We report an uncommon case of lymphocutaneous sporotrichosis.

CASE REPORT

A 48-year-old female from a rural background presented with a large warty lesion with minimal purulent discharge on arm since one month. On examination it was well-defined, erythematous, non tender multiple papulo-plaques over the arm along the lymphatics. She denied any history of insect bite, local trauma, or traumatic manipulation of the initial lesion, or staying in areas endemic for cutaneous leishmaniasis. Her medical and family history were unremarkable. She had received repeated treatments with antibiotics at a health center without improvement. Hair and nails were normal. General physical and systemic examination did not reveal any abnormality. Routine biochemistry and hematological investigations including chest X-ray were Mantoux test was negative. Repeated examination for yeast cells and/or sclerotic bodies in 10% KOH mounts from lesional scrapings or Leishman Donovan (LD) bodies in Giemsa-stained tissue smears yielded no organism. A skin biopsy from the lesion showed keretanized stratified s quamous epithelium and mixed inflammatory cell infiltration comprised of sheet of histocytes. PAS staining for fungal spores was present.





Figure 1&2: Shows multiple papulo-plaques over the arm along the lymphatics.

DISCUSSION

A painless papule develops at the site of traumatic inoculation of the fungus, which progresses to a nodular lesion both in lymphocutaneous and fixed cutaneous sporotrichosis. This usually evolves into a nodule, or noduloulcerative, or erythematous plaque localized at the inoculation site in fixed cutaneous sporotrichosis, or new lesions develop along the lymphatics of lymphocutaneous variant. [3]

Our patient had presentation of lymphocutaneous sporotrichosis with primary lesion over the arm along the lymphatics. The lesion may also develop into a verrucous nodule enlarging to a warty plaque often leading to diagnostic confusion of chromoblastomycosis or TBVC. The demonstration of sclerotic bodies on KOH mounts and culture of causative fungus in SDA is essential for the diagnosis in chromoblastomycosis cases. However, TBVC/LV, a paucibacillary *Mycobacterium tuberculosis* infection of the skin, being common in India was distinctly possible in this case, but growth of *S. schenckii* on SDA was diagnostic.

Verrucous lesions in chronic cutaneous sporotrichosis have been reported uncommonly. A 16-month-old Korean girl had verrucous plaque on the dorsum of the hand while another 7-year-old boy developed a verrucous sporotrichosis over the chin after a bicycle accident. Both the patients were treated successfully with itraconazole given for 14 weeks. Carr *et al.* also reported a case of extensive verrucous sporotrichosis involving the entire lower extremity mimicking cutaneous blastomycosis. [2]

CONCLUSION

Although uncommon, verrucous lesions may occur in cutaneous sporotrichosis as well. These need to be differentiated from other common infective disorders (vide supra). High index of clinical suspicion, particularly in nonendemic regions, is imperative for accurate treatment and to prevent morbidity associated with delayed diagnosis.

Declaration of Patient Consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/ their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their

names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Conflict of Interest- Nil.

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