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Case Report

Primary cutaneous aspergillosis in an immunocompetent individual

Aatish Tamta*, Heena Singdia, Monesh Dhakar, Deepika Kothari, Puneet Bhargava, Deepak K. Mathur

Department of Skin and Venereal Diseases, SMS Medical College, Jaipur, Rajasthan, India

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***Correspondence:**
Dr. Aatish Tamta,
E-mail: aatishtamta77@gmail.com

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ABSTRACT

Aspergillosis is an uncommon fungal infection in which primary cutaneous sites are very rare. Most cases occur in immunocompromised patients and infection in immunocompetent patients, is extremely rare, but an increase in prevalence has been noted in last 20 years. A case of primary cutaneous aspergillosis (PCA) in a 40-year-old immunocompetent shopkeeper resident of Jaipur Rajasthan presenting with verrucous growth on the lower lip has been reported in this case study.

Keywords: Immunocompromised, Fungal infection, Verrucous

INTRODUCTION

Aspergillosis species are a large group of common saprophytic moulds which are isolated from soil, air, and plant materials.

Primary cutaneous aspergillosis (PCA) occurs at the site of direct injury that may be due to surgery, burn, trauma, occlusive dressing, intravenous cannulation or in conditions where an individual is exposed to high spore counts such as farming.[1-3] It can also happen directly in the surgical wound among some transplant patients.

Secondary cutaneous aspergillosis spreads through hematogenous route to the skin from distant focus.[4,5]

CASE REPORT

The patient is 40-year male resident of Jaipur, shopkeeper by occupation presented with a red lesion on lower lip 21 days back followed by a single vegetative lesion on the lower lip not associated with itching, pain or bleeding. There was no history of tobacco chewing, smoking, and alcohol intake. History of any immunodeficiency and any immunosuppressive drug consumption was denied by the patient.

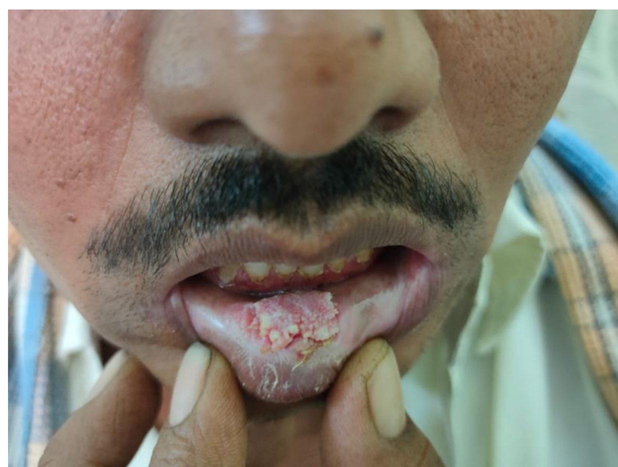

Figure 1: Varrucous growth on lower lip.

On examination the patient had a verrucous plaque with erythematous base of size 2.5×2 cm with mild tenderness with no other systemic abnormalities (Figure 1). A cutaneous biopsy was sent which shows squamous mucosa with underlying fibrosis and chronic inflammation. Numerous septate and thin-walled fungal hyphae were seen suggestive of aspergillosis. The other lab investigations were non-significant. At present the patient is taking capsule itraconazole 200 mg BD and the size of plaque has been reduced.

DISCUSSION

Although there are 350 species of aspergillus, PCA is a rare disease caused by few pathogenic species such as *Aspergillus fumigatus, A. flavus, A. terrestrial* and *A. ustus*.[6,7] Clinically it appears as violaceous macules, papules or plaques that can progress to necrotic ulceration with central Escher.[8,9] The most common condition associated with PCA are haematological malignancies and human immune-deficiency virus (HIV).[10] In immunocompetent patients, PCA usually associated with trauma, surgery, foreign catheter use or by inoculation of aspergillus spores in a traumatized skin.[11] In our case the patient had a plaque on lower lip which is a very rare site. The patient was immunocompetent based on HIV negative status, no history of any immunodeficiency and no long-term use of steroids or any other immunosuppressive medications.

The antifungal drugs active against aspergillus include voriconazole, posaconazole, isavuconazole, caspofungin, micafungin, and amphotericin B. In our case the patient was advised capsule itraconazole 200 mg twice daily and the size of the lesion has reduced after taking the medications.

CONCLUSION

PCA in an immunocompetent individual is a rare disease and lip is a very rare site. Therefore, in such cases biopsy from the lesions should be performed to make the diagnosis and itraconazole can be used as first line therapy.

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