

Pubic Majocchi Granuloma in a 49-Years- Old Immunocompetent Woman Performing Skin Bleaching

Simpara Bakary¹, Thiam Hawa N'diaye¹, Cisse Lamissa^{1*}, Kanouté Abdoulaye¹, Diakite Mamoudou¹, Guindo Binta¹, Keita Alimata¹, Faye Ousmane¹

¹Dermatologist, Bamako, Mali

DOI: [10.36347/sasjm.2023.v09i05.031](https://doi.org/10.36347/sasjm.2023.v09i05.031)

| Received: 29.04.2023 | Accepted: 24.05.2023 | Published: 30.05.2023

*Corresponding author: Cisse Lamissa
Dermatologist, Bamako, Mali

Abstract

Case Report

Majocchi's granuloma is a deep dermal infection caused by dermatophytes. It has been described in the context of immunodepression secondary to infection with immunosuppressive treatment. It represents an important functional and aesthetic prejudice. The diagnosis is often late. We report a case located on the pubis in a 49-year-old immunocompetent patient in a context of voluntary depigmentation. The patient presented with onychomycosis and dermatophytes on the pubic area. The diagnosis was based on clinical findings and the presence of mycelial filaments on direct examination. The patient was treated with terbinafine with regression of the lesions in four weeks.

Keywords: Granuloma, Majocchi, depigmentation, immunocompetent.

Copyright © 2023 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

INTRODUCTION

Majocchi's granuloma is a deep dermal infection by dermatophytes. Its pathogenesis remains unknown. It is responsible for aesthetic damage and significant discomfort due to pain.

Majocchi's granuloma is usually described on hairy areas. The seriousness of this condition lies in the potential infectious complications.

Its clinical appearance is misleading, which is a factor in delaying the diagnosis. Granuloma of Majocchi has been reported in the context of immunodepression or in children [1]. The occurrence in the immunocompetent has been explained by local traumatic or iatrogenic factors [1].

Superficial mycoses are commonly reported in South Saharan Africa. However, we did not find any case of granuloma of Majocchi reported by these authors.

We report a case of Majocchi's granuloma of the pubic area on voluntary depigmentation in a 49-year-old female patient.

CASE REPORT

The patient was a 49-year-old nurse with no previous medical or surgical history who consulted for a painful pubic rash. The patient was practicing voluntary depigmentation, using corticosteroids and hydroquinone. This condition had been evolving for 1 month. She had been suffering from onychomycosis for several months. The pubic involvement would have started with a scaly dermatosis, followed by inflammatory nodules. She was treated with amoxicillin, tramadol and antiseptic. Despite this treatment, the pain and inflammation increased. The lesions became confluent after shaving the pubic area. She consulted a dermatologist because of the worsening of the clinical picture.

On examination, the patient was in good general condition with a temperature of 38 degrees Celsius. On dermatological examination, an inflammatory placard measuring 19 × 8 cm, shiny red, with a bumpy surface dotted with pustules and erosions in the center, was noted. The placard was poorly limited and localized at the pubic level and extended into the right inguinal fold. The skin was taut, painful to palpation, without local heat. The periphery of the lesion was hyperpigmented, with fine scaling extending to the groin folds, the thighs and the intergluteal folds

with a circular border. There was no inguinal adenopathy.

There was nail involvement on the right thumb and ring finger. The nail plate was striated, the surface was irregular with subnail hyperkeratosis and depression of the free edge.

The rest of the clinical examination was unremarkable. In view of the scaly lesions with circinate borders and the nail involvement, the hypothesis of Majocchi's granuloma was raised.

Mycological sampling of the scales and nails revealed mycelial filaments. Culture was not performed. The diagnosis of Majocchi's granuloma was retained.

A biological workup was performed. Biochemical tests showed normal blood glucose, creatinine and transaminases, and negative tests for hepatic viruses and HIV.

The patient was treated with Terbinafine 250 mg daily for 1 month. A regression of the lesions was reported from the first week of treatment.



A. Pubic granuloma



B. Onychomycosis

DISCUSSION

We report a case of Majocchi's granuloma in a 49-year-old female patient in the context of voluntary depigmentation.

The diagnosis was based on clinical findings and the presence of mycelial filaments on direct examination. This diagnosis could have been confirmed by culture to identify the species. This examination could not be performed. However, the ungual involvement, the circinate lesions and the regression of the granuloma under griseofulvin confirm the diagnosis.

We could have suggested a mycetoma, but there were no fistulas, no granulation and the evolution was acute.

Our observation is particular because of its occurrence in an immunocompetent patient. Indeed, Majocchi's granuloma is usually described in a context of immune depression, whether infectious, metabolic or iatrogenic. Steiner [2] reported the case of a heart transplant patient on prednisone, azathioprine and tacrolimus who developed a generalized *Trichophyton rubrum* infection presenting as Majocchi granuloma. Our case had none of these conditions and was not on systemic immunosuppressant therapy. The case is also peculiar because of its location on the pubis. Indeed, the

reported cases are mostly localized to the limbs [1]. The last particularity in our patient is the typical granulomatous aspect. Indeed, the clinical aspect is rather follicular in the immunocompetent patient [1].

The source of the fungal infection could have been onychomycosis. The pubis may have been affected by manicuring. A dermatophyte infection then occurred followed by a secondary invasion of the deep layers of the skin favored by repeated shaving as described in the literature [3].

This invasion may have been favored by skin depigmentation. Indeed, depigmenting products are most often based on corticoids and/or hydroquinone. These molecules cause skin fragility, which becomes thinner and local immunosuppression.

The use of steroid-based creams has been described as a factor favoring the occurrence of skin infections in general [4] and Majocchi's granuloma in particular [5]. Our case was rapidly improved by terbinafine.

CONCLUSION

Majocchi's granuloma should be considered in the presence of an isolated granulomatous lesion of the hairy areas. Further work is needed to describe the risk factors for the occurrence of this condition.

BIBLIOGRAPHY

1. Boral, H., Durdu, M., & Ilkit, M. (2018). Majocchi's granuloma: current

perspectives. *Infection and drug resistance*, 11, 751-760.

2. Steiner, U. C., Trüeb, R. M., Schad, K., Kamarashev, J., Koch, S., French, L. E., & Hofbauer, G. F. (2012). Trichophyton rubrum-induced Majocchi's Granuloma in a heart transplant recipient. A therapeutic challenge. *Journal of dermatological case reports*, 6(3), 70-72.
3. Rallis, E., Katoulis, A., & Rigopoulos, D. (2016). Pubic Majocchi's granuloma unresponsive to itraconazole successfully treated with oral terbinafine. *Skin appendage disorders*, 1(3), 111-113.
4. Dégboé, B., Koudoukpo, C., Elégbédé, N., Agbéssi, N., Habib, A., D'ALMEIDA, C., ... & Atadokpèdé, F. (2019). Folliculite ankylostomienne compliquant une dépigmentation cutanée volontaire au Bénin. *Bulletin de la Societe de Pathologie Exotique*, 112(4), 190-194.
5. Li, F. Q., Lv, S., & Xia, J. X. (2014). Majocchi's granuloma after topical corticosteroids therapy. *Case Reports in Dermatological Medicine*, 2014. Di sur: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4227411/>
6. Swali, R., Ramos-Rojas, E., & Tying, S. (2018, January). Majocchi granuloma presenting as a verrucous nodule of the lip. In *Baylor University Medical Center Proceedings* (Vol. 31, No. 1, pp. 115-116). Taylor & Francis.
7. Kanaan, I. C. S., Santos, T. B. P. D., Kac, B. K., Souza, A. M. V. D., & Cerqueira, A. M. M. D. (2015). Majocchi's granuloma-Case report. *Anais Brasileiros de Dermatologia*, 90, 251-253.