

## Unusual Presentation of Chromoblastomycosis with a Brief Review of its Atypical Cutaneous Presentations

Sir,

Chromoblastomycosis (CM) is a chronic subcutaneous fungal infection clinically characterized by verrucous skin lesions. The disease frequently involves the lower extremities of adult males who work barefoot in agricultural fields.<sup>[1]</sup> A history of themechanical trauma or injury to the site ofinfection marks the portal of entry as the fungal spores may be present in the soil and plant debris. Chromoblastomycosis lesions are polymorphic. The diagnosis is confirmed bythe histopathological demonstration of chromo bodies/muriform cells inthe tissue and isolation and identification of the species in culture. There are different species of dematiaceous fungi causing CM of which *Fonsecaea pedrosoi* is the most common.<sup>[2]</sup> Here, we report an atypical presentation of CM in a female from a hilly area.

A 48-year-old female rubber tapper from a hilly area presented with asymptomatic reddish raised lesions overthe volar aspect of theright forearm of 3 years duration. Thelesions started as a single small red raised lesion and



Figure 1: Multiple discrete erythematous-infiltrated papules and pustules on the volar aspect of the right forearm

progressively increased in size and number over a period. She also developed a few pus-filled lesions in between. The lesions were asymptomatic. She denied any history of trauma. On examination, there were predominantly erythematous-infiltrated papules, both discrete and confluent, with the skin in between in some areas showing hypopigmentation, along with a few pustules localized to a single site on the volar aspect of theright forearm [Figure 1]. With the clinical possibility of sarcoidosis and papular-type of lupus vulgaris, the patient was investigated. The chest X-ray was normal and theMantoux test wasnegative. The Retro test was negative. The investigations for sarcoidosis were non-contributory. The skin biopsy demonstrated chromobodies (muriform bodies) inside thegiant cells, the hallmark of chromoblastomycosis [Figure 2]. The fungal culture on Sabourauds dextrose agar showed slightly heaped black velvety and hairy colonies, suggestive of dematiaceous fungi. On slide culture microscopy and normal saline mount, theconidiophores were brown and showed dense apical branching with elongated macroconidia and clustered round-to-oval microconidia [Figure 3], while a high power showed the macroconidia to be barrel-shaped and microconidia shield-shaped, characteristic features of genus *Fonsecaea* [Figure 4]. She was started on oral itraconazole 200 mg daily. She is now under follow-up in the outpatient clinic.

CMis one of the most frequent infections caused by melanized fungi. Nodular, plaque-type, tumoral, ulcerative, cicatricial, sporotrichoid, and verrucous are the common clinical types described.<sup>[3]</sup> Our patient presented with erythematous-infiltrated papules and a few pustules on the forearm, without any preceding trauma and clinically not suggestive of CM. Relevant investigations did not support the diagnosis of sarcoidosis or lupus vulgaris. However, histopathology showed chromobodies in the giant cells

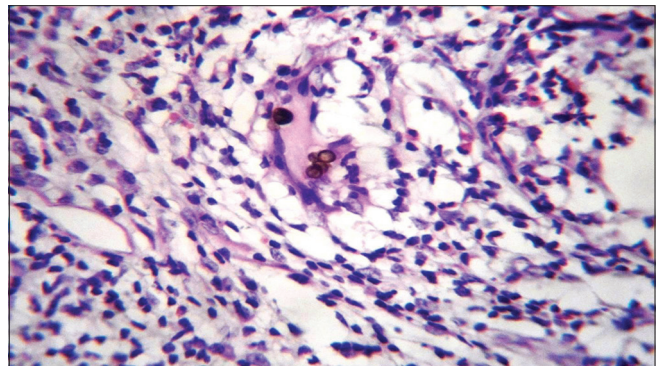
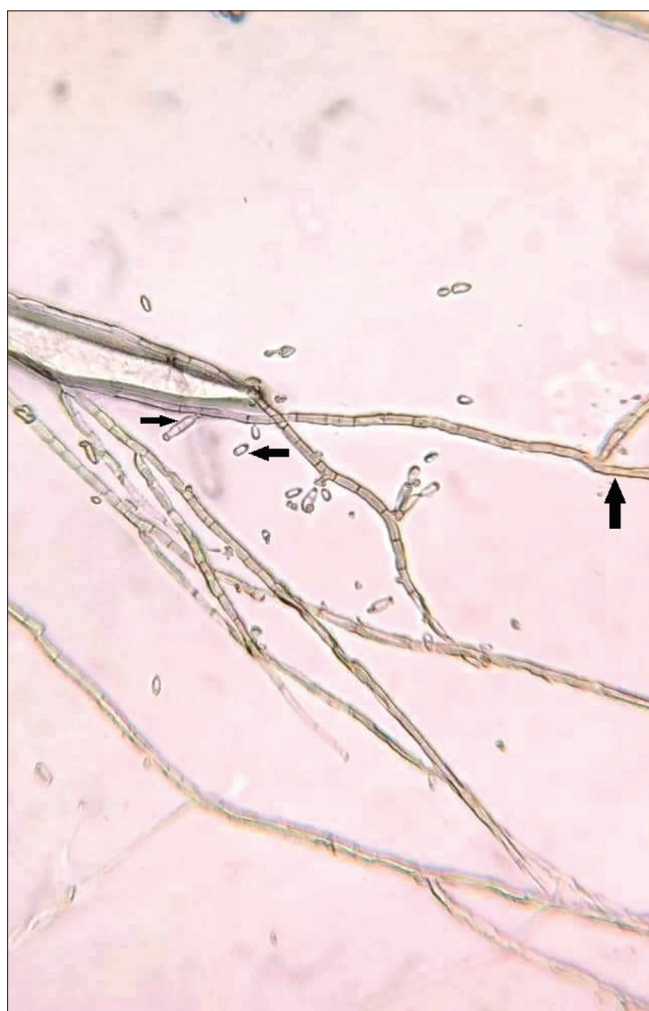


Figure 2: Skin biopsy showing multiple yellowish-brown sclerotic chromobodies in the giant cells, H and E X400

**Table 1: Rare presentations of chromoblastomycosis**

Author	Clinical type	Species	Treatment
Wiss K, <i>et al.</i> <sup>[6]</sup> (1986)	Keratoacanthoma-like	Not done	Not mentioned
Lakshmi TSS, <i>et al.</i> <sup>[7]</sup> (1999)	Palmo-plantar psoriasis	Fonsecaea pedrosi	Not mentioned
Naveen KN, <i>et al.</i> <sup>[8]</sup> (2012)	Phagedenic ulcer on the face	Fonsecaea	Fluconazole
Dhavan AK, <i>et al.</i> <sup>[9]</sup> (2016)	Atrophic annular plaque on the forearm	Fungal culture negative	Terbinafine
Jaleel A, <i>et al.</i> <sup>[10]</sup> (2017)	Mycetoma-like	Fonsecaea pedrosi	Terbinafine
Katoch S, <i>et al.</i> <sup>[11]</sup> (2020)	Solitary plaque on the left forearm	Not done	Itraconazole
Present case (2021)	Sarcoidosis-like papules on the forearm	Fonsecaea	Itraconazole



**Figure 3:** Slide culture microscopy showing brown conidiophores with apical branching (vertical arrow) with elongated macroconidia (right pointing black arrow) and clustered round-to-oval microconidia (left pointing black arrow), normal saline mount X100.

and the fungal culture demonstrated dematiaceous fungi and the slide culture microscopy showed characteristic features of the genus *Fonsecaea*. Therefore, we made a final diagnosis of CM with atypical presentation mimicking sarcoidosis/papular lupus vulgaris caused by *Fonsecaea*. Presentation with multiple discrete and confluent papules mimicking sarcoidosis is very rare for CM. Since this is a pigmented dematiaceous fungi, it can be demonstrated in routine H and E stains and normal saline and KOH-mounted



**Figure 4:** High power showing the macroconidia to be barrel-shaped and microconidia shield-shaped, characteristic features of genus *Fonsecaea*, normal saline mount X400

slides and does not require special stains. Sarcoidosis-like presentation is very rare for CM. Hence, a very careful histopathological examination is of paramount importance, otherwise, the diagnosis may be missed since sarcoidosis is not a rare disease in India with an estimate between 61 and 150 cases per 100,000 in outdoor patients according to a study done in India, and wrong treatment could be given to the patient.<sup>[4]</sup> The drug of choice for CM is itraconazole 200–400 mg per day till clinical remission. Terbinafine, Fluconazole, and potassium iodide are also effective.<sup>[5,8-10]</sup> CM can present with rare atypical presentations and the various rare clinical presentations are given in Table 1. We are reporting a very rare presentation of CM.

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### **Conflicts of interest**

There are no conflicts of interest.

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