International Journal of Infectious Diseases 131 (2023) 50–52

Contents lists available at ScienceDirect

International Journal of Infectious Diseases

journal homepage: www.elsevier.com/locate/ijid

Medical Imagery

Chromoblastomycosis: delayed diagnosis with extensive cutaneous lesions

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ARTICLE INFO

Article history:
Received 8 March 2023
Revised 20 March 2023
Accepted 21 March 2023

Chromoblastomycosis (CBM) is a chronic cutaneous mycosis caused by the implantation of brown-pigmented fungi, primarily *Fonsecaea* species. It is a neglected tropical disease affecting impoverished populations in the tropics [1,2]. The clinical appearance of CBM is often polymorphic, with at least five different forms: nodular, tumoral, verrucous, plaque, and scarified; resulting in misdiagnosis or delayed diagnosis. A delayed diagnosis leads to chronic lymphedema, ankylosis, antifungal resistance, and in rare cases transformation into squamous cell carcinoma [3,4]. Thus, early identification of the pathogens through direct microscopy, histopathological examination, or culture, as well as, more advanced molecular and serologic tests, is crucial [5].

We described a 36-year-old barefooted farmer who was presented with an extensive itchy verrucous cutaneous lesion that had progressed from his left foot to the adjacent leg over the previous 8 years (Figure 1). An incisional biopsy (Figures 2a–c) and scrape samples for 10% potassium hydroxide preparation (Figure 3) were taken from the lesions and both revealed golden brown septated fungal spores variably described as, Medlar bodies, sclerotic bodies, or “copper pennies”.

Thus, in resource-limited areas, a high level of clinical suspicion combined with relatively inexpensive investigations can facilitate rapid diagnosis and prevent complications of CBM.

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https://doi.org/10.1016/j.ijid.2023.03.040
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Figure 1. Chromoblastomycosis: clinical appearance; Papulo-nodular and verrucous confluent and satellite lesions in the background of diffuse non-pitting edema.

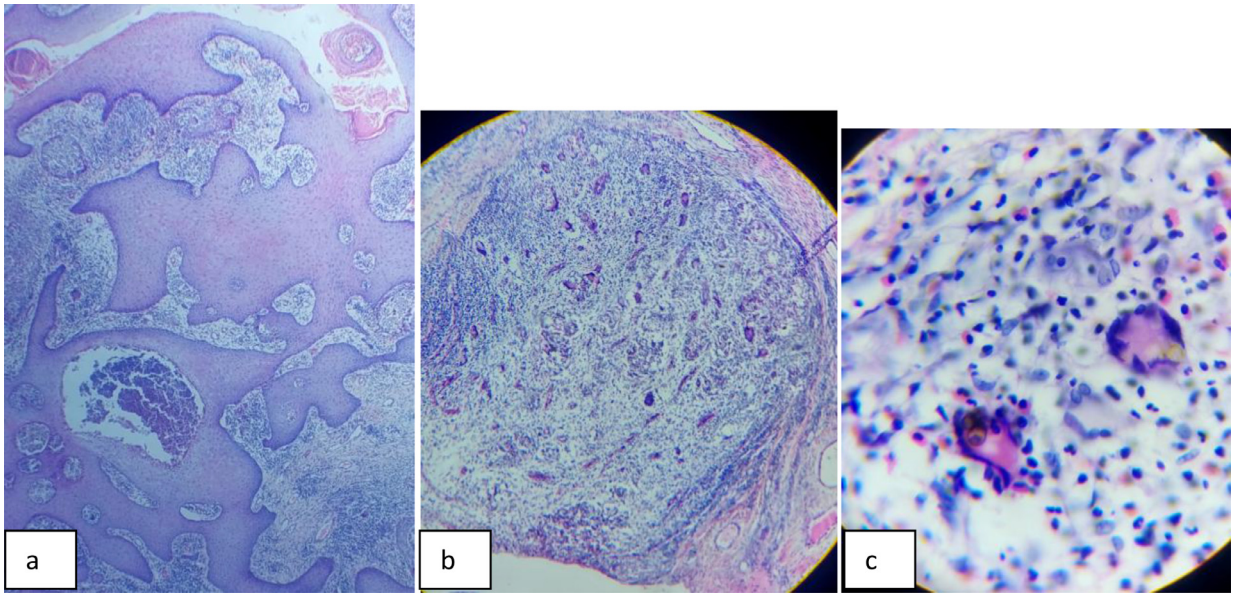


Figure 2. Chromoblastomycosis: histopathologic features (hematoxylin and eosin stained section): low power field shows pseudoepitheliomatous hyperplasia with intraepidermal abscess (a) and numerous multinucleated giant cells (b); high power field revealed bronze-colored sclerotic bodies (c).

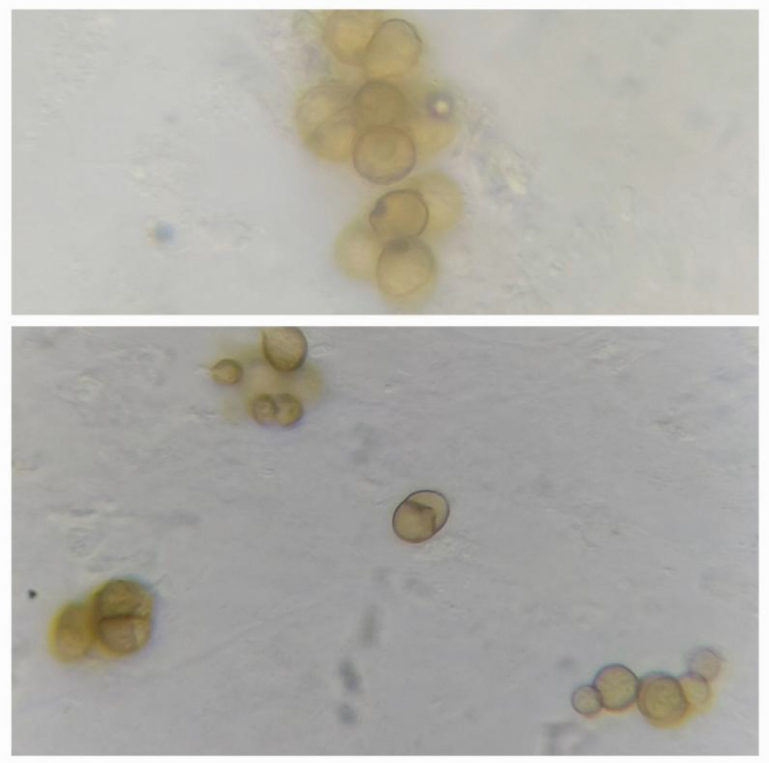


Figure 3. Chromoblastomycosis: 10% potassium hydroxide preparation showing multiple golden brown septated “copper pennies”.

Declaration of competing interest

The authors have no competing interest to declare.

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Ethical approval

This study has been approved by the Research Ethical Review Committee of the School of Medicine, Debre Markos University (S/R/C/01/04/23). Before data collection, informed consent was acquired after the studies were well explained. The laboratory procedure was done with the essence of beneficence and data were kept confidential.

Author contributions

All authors contributed equally to this work.

Availability of data and materials

Supporting data for the current study are available from the corresponding author upon reasonable request.

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