

Buschke's Scleredema Post Covid 19 Infection: About a Case

K. Rharib^{1*}, L. Bendaoud¹, M. Aboudourib¹, O. Hocar¹, S. Amal¹¹Dermatology Venerology Department, CHU Med VI, Biosciences and Health Laboratories, Faculty of Medicine and Pharmacy, Marrakech, MoroccoDOI: [10.36347/sjmcr.2024.v12i01.018](https://doi.org/10.36347/sjmcr.2024.v12i01.018)

| Received: 02.12.2023 | Accepted: 08.01.2024 | Published: 16.01.2024

***Corresponding author:** K. Rharib

Dermatology Venerology Department, CHU Med VI, Biosciences and Health Laboratories, Faculty of Medicine and Pharmacy, Marrakech, Morocco

Abstract

Case Report

Buschke scleredema is a rare disease characterized by sclerotic edema that affects the upper part of the trunk and can extend to the limbs. It occurs at any age. It can be accompanied by extracutaneous damage. Three types can be distinguished within this pathology: type I appears suddenly secondary to an infection. Type II develops chronically outside of an infectious and diabetic context associated with monoclonal gammopathy. Type III has been called diabetic scleredema.

Keywords: Scleredema, rare disease, skin induration, extra-cutaneous sign.

Copyright © 2024 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

Buschke scleredema is a sclerodermiform syndrome of unknown cause. It is a rare disease that is sometimes associated with hypergammaglobulinemia. The initial description (Buschke's Sclerødema adutorum) was made in 1902 by Mr Buschke who described a 46-year-old adult who presented, following a flu, a skin induration that began at the nape of the neck and then spread widely, sparing hands and feet [1].

OBSERVATION

We report the case of a 15-year-old female patient, with failure to thrive with primary amenorhea, and cerebral thrombophlebitis under treatment and who

presents a cutaneous sclerosis of both hands, two wrists and both legs, with edema facial and edema of the lower limb that does not settle, all evolving for 2 years with remission flare-ups. Without other associated cutaneous or extra-cutaneous signs. The patient reported the notion of a covid 19 infection before the appearance of dermatological symptoms. She also presents hypochromic microcytic iron deficiency anemia without other biological abnormalities, notably no diabetes or dysthyroidism. The skin biopsy showed Buchke's scleroedema. Protein electrophoresis was without abnormalities.

The evolution was marked by a spontaneous improvement of the lesions.



Figure 1: Facial edema



Figure 2: Cutaneous sclerosis with edema of the feet not taking the bucket

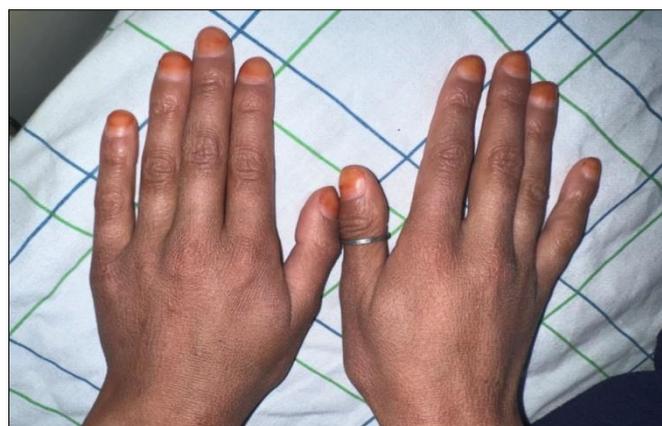


Figure 3: Cutaneous sclerosis with edema of hands not cupping

DISCUSSION

Buschke scleredema is a rare disease characterized by sclerotic edema that affects the upper part of the trunk and can extend to the limbs. It occurs at any age. It can be accompanied by extracutaneous damage [2].

Three types can be distinguished within this pathology: type I appears suddenly secondary to an infection, its evolution is favorable within a few months. Type II develops chronically outside of an infectious and diabetic context associated with monoclonal gammopathy. Type III has been called diabetic scleredema. This type represents approximately 20% of cases and is usually observed in obese middle-aged men suffering from poorly controlled insulin-dependent diabetes and especially at the stage of degenerative complications [3]. Other potentially associated conditions include a variety of endocrinopathies, systemic diseases, and tumors [4].

It is a rare mucinosis, the pathophysiology of which is still poorly understood, characterized by excessive deposition of mucin and thickening of collagen bundles in the dermis, leading to cutaneous induration, which does not pit, of the skin from the neck, extending to the shoulders and upper part of the trunk, but sparing the hands and feet [4]. If the skin involvement generally

remains mild, a cardiac location or an underlying pathology can modify the prognosis, mainly in type III.

If abstention is the rule when scleredema does not have severe functional impact, no treatment is well codified when it proves necessary. Treatment of underlying diabetes does not usually improve scleredema [3].

The diagnosis is clinico-histological. The biopsy shows large bundles of collagen interspersed with a substance that can be stained with Alcian blue, mucin. An etiological investigation should be carried out in the event of Buschke's scleredema. The treatment is not codified. Puvotherapy has given good results for Buschke's scleredema in diabetics. The evolution of the acute form is generally favorable with or without treatment. Methotrexate has softened the skin in some patients [5].

CONCLUSION

Physicians should suspect scleredema in any patient with diffuse thickening of the skin where the hands and feet are spared, particularly if diabetes or a previous febrile episode was present. Once the diagnosis of scleredema is made, hypergammaglobulinemia or diabetes must be ruled out [2].

BIBLIOGRAPHY

1. Puzenat, E. S(2013). cléroedème de Buschke
Thérapeutique dermatologique 12 mars 2013
2. Younes, K. B., Bouchaala, M., Bouattour, Y.,
Mseddi, M., Masmoudi, A., Amouri, M., ... &
Boudaya, S. (2019). Le scléroedème de Buschke: à
propos de trois cas. *La Revue de Médecine
Interne*, 40, A150.
3. Elleuch, M., Charfi, H., Ben Salah, D., Hadj Kacem,
F., Mnif, F., Mnif, M., Charfi, N., Rekik, N., &
Abid, M. (2020). Scléroedème de Buschke : à propos
de 2 cas *La Revue de Médecine Interne*, 41, A136-
A137, décembre.
4. Rekik, M., Baklouti, M., Elleuch, M., Sellami, K.,
Bahloul, E., Mseddi, M., ... & Turki, H.
(2022). Buschke's scleredema: about 11
observations. *The Journal of Internal Medicine*, 43,
A439.
5. William, H. B., Ince d'Akgun, & Terry, L. (2006).
Moore Scleredema adutorum de Buschke: *rapport
de cas et revue de la littérature National Library of
Medicine*, 35(6), 355-9.