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Dermatology

# Morpheus in Saber Stroke in a 17-Year-Old Boy with Aesthetic Repercussions Seen in Dermatological Consultation at the Sominé Dolo Hospital in Mopti

Fofana Youssouf<sup>1\*</sup>, Amadou Galo Dicko<sup>2</sup>, Tall Koreissi<sup>2</sup>, Kéita Lassine<sup>4</sup>, Touré Sokona<sup>3</sup>, Diarra Alassane<sup>1</sup>, Kondé Adama<sup>1</sup>, Bah Mouctar<sup>1</sup>, Mamoutou Dembélé<sup>1</sup>, Dramane Samaké<sup>1</sup>

<sup>1</sup>Sominé Dolo Hospital in Mopti, Mali
<sup>2</sup>Bamako Dermatology Hospital, Mali
<sup>3</sup>Sikasso Reference Health Center, Mali
<sup>4</sup>Referral Health Center of Commune II of Bamako, Mali

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\*Corresponding author: Youssouf Fofana Sominé Dolo Hospital in Mopti, Mali

#### Abstract

Case Report

Morpheas are characterized by cutaneous induration (sclerosis), evidence of fibrosis of the dermis and sometimes of the underlying tissues without recognized etiology. We report a case of linear Morpheus in saber cut with aesthetic repercussions. A 17-year-old Malian boy consulted for a hypochromic strip of the face and scalp that had been evolving for 8 months. The lesion began with a non-pruritic and slightly painful erythematous spot. On inspection, it was a slightly atrophic hypochromic band, 2 cm wide and 12 cm long extending from the head of the left eyebrow to the vertex. Palpation found cutaneous sclerosis along the entire length of the band. There was no Raynaud's phenomenon or sclerodactyly. The rest of the clinical examination was normal. A biopsy of the lesion with anatomopathological examination was performed and the diagnosis of morphea was retained. The biological assessment carried out did not show any inflammatory syndrome or antinuclear factors. The skull x-ray did not find any bone abnormality. Treatment with systemic corticosteroids (prednisone) at a rate of 1 mg/kg/day associated with methotrexate 20 mg/week was introduced. After 3 months of well-monitored treatment, the evolution was favourable, with stabilization of the skin band. Morpheas cause aesthetic or functional damage that is sometimes significant. Their management must take into account the quality of life of affected subjects whose life expectancy is considered normal with an assessment of the risk- benefit of potentially aggressive therapies.

Keywords: Morphée, saber cut, boy, aesthetic impact.

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# **INTRODUCTION**

Morpheas (also called scleroderma localized), as opposed to systemic sclerosis, are characterized by cutaneous induration (sclerosis), witnessing fibrosis of the dermis and sometimes of the underlying tissues [1].

The prevalence of the different clinical forms is different in children and adults [2, 3] with a greater prevalence of linear forms in children (over 60%) and plaque forms in adults (over 60%) [4].

During morphea, there is a female predominance with a sex ratio of 2-3 to 1. The functional, aesthetic and psychological consequences are often significant [5]. We report a case of linear Morpheus in saber cut with aesthetic repercussions.

# **OBSERVATION**

A 17-year- old boy, shepherd, single consulted in the medical department of the Sominé Dolo hospital in Mopti for a hypochromic band of the vertex which was painful and non-itchy and had been evolving for 8 months. The lesion had started at the level of the forehead then gradually extending to the level of the scalp, which motivated him to regularly wear a cap to camouflage the hypochromic band because of its unsightly character. There was no notion of initial trauma or irradiation, and the patient had no particular personal history. There was no notion of autoimmune disease in the family.

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The general condition of the patient was well preserved and his conjunctivae were well colored. He was afebrile and his BMI=20.

Dermatological examination: on inspection, it was a slightly atrophic hypochromic band, 2 cm wide and 12 cm long with pigmented islands extending from the head of the left eyebrow to the vertex at the origin of the a cicatricial alopecia. The anterior edge of the scalp was slightly hypochromic. Palpation had found cutaneous sclerosis along the entire length of the band. Ophthalmological examination found no abnormalities and neurological examination was unremarkable. There was no Raynaud's phenomenon or sclerodactyly.

The rest of the clinical examination was normal.

A biopsy of the lesion with histological examination was performed and the diagnosis of morphea was retained.

The biological assessment performed did not show any inflammatory syndrome or antinuclear factors. The skull x-ray did not find any bone abnormality.

Treatment with systemic corticosteroids (prednisone) at a rate of 1 mg/kg/day associated with methotrexate 20 mg/week was prescribed. After 3 months of well-monitored treatment, the evolution was favorable with disappearance of the pain.



Figure 1: Atrophic hypochromic band, extending from left eyebrow head to vertex with cicatricial alopecia (before treatment)



Picture 2: atrophic hypochromic band, extending from left eyebrow head to vertex with cicatricial alopecia (after treatment)

### DISCUSSION

To our knowledge, this was the first case of linear saber-cut morphea described in Mali. It is a rare condition, with an estimated incidence of 27 cases per million inhabitants [1].

Saber-cut scleroderma begins on the forehead, usually in children with a peak frequency between 7 and 8 years of age in the form of a paramedian band, white or brown, 1 to 3 cm wide, at upper base, overflowing onto the scalp, causing cicatricial alopecia [5], the vertical zone is depressed in a "saber stroke", testifying to atrophy associated with cutaneous sclerosis [5].

A family context of autoimmune diseases was found in more than 10% of children and a traumatic factor prior to the development of the disease in about 15 % [4]. In our patient, there was no notion of initial trauma or similar case in the family.

Morphea can sometimes be confused with certain pathologies: systemic scleroderma, scleroatrophic lichen and Lyme borreliosis.

It differs from systemic forms of scleroderma by the absence of proximal cutaneous sclerosis, sclerodactyly, Raynaud's syndrome and organic involvement (gastrointestinal, pulmonary) [1]. These different complications were not found in our patient.

In our patient, the biological assessment carried out (NFS, ESR, CRP, Ac-antinuclear, anticentromere, Ac-anti-scl70) had made it possible to eliminate systemic sclerosis and confirm the diagnosis of morphea.

Extra-genital sclero-atrophic lichen which manifests as atrophic, wrinkled, scar-like spots and plaques associated with moderate pruritus. These lesions are mainly located on the neck, trunk, proximal extremities, inner side of the wrists and sites of trauma or pressure [6].

As for borreliosis, it manifests itself in the early phase by an erythematous spot or plaque which extends for days or weeks to reach at least 5 cm and the central healing can constitute an annular lesion and sometimes an "eye" lesion of a bull". This condition occurs mainly in the United States, Scandinavia and Central Europe [6].

The current treatment of cutaneous scleroderma is poorly codified due to the scarcity of controlled and randomized studies in this disease [7].

Severe forms are treated with systemic corticosteroids and methotrexate to try to stop the evolutionary process and prevent sequelae [8]. Our case had been considered as a severe form because of its high size, its display character and the presence of pain. A treatment based on prednisone 1 mg/kg/day combined with methotrexate 20 mg/week was prescribed.

In addition to drug treatment, the patient and his parents were explained the benign nature of the pathology.

The usual evolution of superficial morphea occurs over years with a tendency to regression of fibrosis after an average of 2-3 years and possibilities of relapses [8]. In our patient, after three treatments, the evolution was marked by the stability of the band and the disappearance of the pain.

### **CONCLUSION**

Morphea en coup de sabre is a condition that generally has a good prognosis in its cephalic location but can cause significant aesthetic and functional repercussions. Their management must take into account the improvement of the quality of life of affected subjects.

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