

# Generalized and Unusual Presentation of Cutaneous Morphea: A Case Report

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**Abstract:** Morphea is an uncommon cutaneous disorder characterized by thickening of the skin. It usually presents as a single or few indurated cutaneous plaques. Herein, we present a case with an unusual and generalized presentation of cutaneous morphea.

**Keywords:** Cutaneous disorder, Cutaneous plaques, Scleroderma, Cutaneous Morphea.

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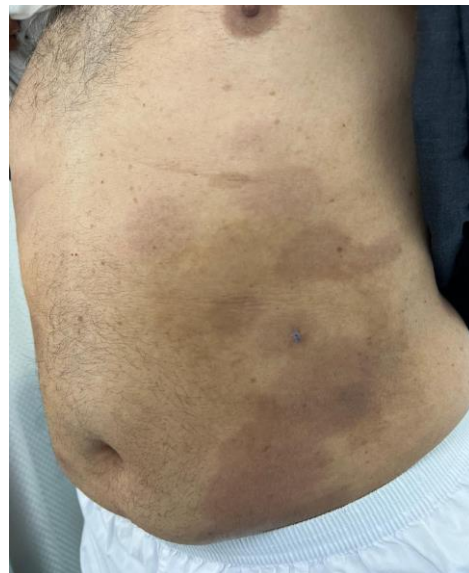
## 1. INTRODUCTION

Morphea is an uncommon condition characterized by the thickening and scarring of the skin and its underlying tissues. The exact cause of morphea is not fully comprehended, but it ultimately leads to an abnormality in the production and breakdown of collagen. (1) Morphea is classified into different subtypes and clinical symptoms and patterns. Lesions vary depending on the phenotype. Early morphea lesions appear as erythematous skin lesions that are mildly itchy and tender. As the lesion progresses, a hardened center surrounded by a purple rim develops. This lesion ultimately leads to permanent pigmentary changes with atrophy of the skin and subcutaneous tissue. In most patients, the lesions resolve spontaneously within a few years, but some patients may develop new lesions with persistent symptoms. (2) The incidence of morphea is 0.4 to 2.7 per 100,000 people, and it is more common in caucasians and more prevalent among females. The prevalence is similar between adults and children. (3)

### Case:

A 57-year-old male presented to Dermatology clinic complaining of non-itchy, multiple oval sclerotic erythematous to violaceous plaques over the trunk for 5 months. The patient is otherwise healthy except for a history of anal fistula. The patient denied any joint pain, difficulty swallowing, or other systemic symptoms. There is no history of medication use. The patient was referred to rheumatology to exclude systemic involvement. Therapy was initiated using topical corticosteroids and phototherapy.





Multiple oval erythematous to violaceous indurated plaques over the trunk

**Investigations:**

We ordered for him punch biopsy and the result was consistent with cutaneous morphea

Lab results:

WBCs: 9.5

RBC: 5.14

HGB: 160

MCV: 91

Creatinine:82

BUN:8

C3 complement: 1.23

C4 complement: 0.20

Anti-smooth muscle antibody: negative

dsDNA Ab: negative

## 2. DISCUSSION

In this case report, we described a 57-year-old male patient presenting with distinctive skin changes consistent with morphea. Morphea, also known as localized scleroderma, is a rare fibrosing disorder characterized by sclerotic skin patches that may be associated with systemic symptoms in some cases (1). Morphea can be categorized into five distinct groups: plaque, generalized, bullous, linear, and deep. (2.) Our case report was plaque morphea. The patient's presentation with non-pruritic, sclerotic erythematous to violaceous plaques is typical of morphea, which often presents as erythematous or violaceous patches that evolve into sclerotic, hairless areas (3). Notably, the patient's lack of systemic symptoms such as joint pain or difficulty swallowing is common, as morphea primarily affects the skin and underlying tissues derived from mesoderm (3).

The pathogenesis of morphea is not fully understood but is thought to involve immune-mediated processes that lead to an imbalance in collagen production and degradation (6). Although the exact cause is unknown, it is hypothesized that it arises from the activation of fibroblasts and injury to the endothelium cells, mediated by T-cells. Instances of morphea occurring simultaneously with other systemic autoimmune illnesses, such as primary biliary cirrhosis, vitiligo, and systemic lupus erythematosus this suggests that morphea is likely an autoimmune disease [5.]. Our case did not demonstrate any correlation of that nature. The condition's more common in females and its occurrence across various age groups makes it a complex clinical entity (3)

We encountered challenges in diagnosing the patient due to the uncommon characteristics of the disease and the atypical pattern of the lesions, which cannot be diagnosed only based on clinical grounds without a histopathological confirmation..

Although the patient had an anal fistula, there is no documented direct association between such conditions and morphea (7). However, there have been reports of drug-induced morphea, providing evidence that external factors may contribute to disease onset or exacerbate an existing condition (8).

The patient was managed with topical therapies and phototherapy, which are commonly used treatments for morphea (1). These treatments aim to soften the skin lesions and improve cosmetic appearance. Phototherapy, specifically UVA1, has been shown to be useful in the treatment of morphea, although the exact treatment regimen should be tailored to the individual patient (9).

The referral to rheumatology was prudent to rule out systemic involvement, which can occur in some cases of morphea. Although our patient did not present with systemic symptoms, a thorough evaluation was necessary to exclude the possibility of an overlap with systemic sclerosis or other systemic rheumatologic conditions (2).

This case highlights the need for awareness of morphea and its clinical manifestations. It also underlines the importance of multidisciplinary management, involving dermatology, rheumatology, physical and occupational therapy, to provide comprehensive care and to monitor for potential systemic involvement.

## 3. CONCLUSION

Morphea is a rare fibrosing skin disease characterized by various patterns of skin lesions and multiple subtypes. In this case report, we present a patient who presented with skin lesions on the trunk that were consistent with morphea, as confirmed by punch biopsy. The purpose of this report is to raise awareness among clinicians in the medical field regarding the specific pattern of skin lesions associated with morphea and improve our understanding of this disease's presentations.

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