

# Atypical Presentation of Grade III Hand-Foot Syndrome in a Breast Cancer Patient Receiving Docetaxel

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## Introduction

Hand-foot syndrome (HFS), is a recognized dermatologic side effect associated with various cytotoxic chemotherapy treatments. Typically, HFS manifests on the palms and the soles. However, we report an unusual case of HFS involving the face and presenting on the dorsal surfaces of the hands and feet.

## Case report

A 73-year-old female patient, undergoing adjuvant chemotherapy with docetaxel following a mastectomy for breast cancer, developed painful erythema on her hands, feet, and face four days after her second cycle of treatment, despite receiving corticosteroid premedication. This erythema was followed by

Figure 2:  
Atypical  
facial lesions  
in hand-foot  
syndrome



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desquamation on the dorsum of her hands (Figure 1), the dorsal aspect of her fingers, as well as on her palms. Additionally, she presented with atypical ulcerated periorificial lesions on her face (Figure 2). The patient was diagnosed with Grade III HFS and was treated with emollients and analgesics, leading to a favorable outcome within approximately one week. According to the French updated imputability method, docetaxel was considered a likely cause (I3). For subsequent infusions, it was recommended to reduce the infusion speed and add both corticosteroids and antihistamines to her treatment regimen, resulting in a good outcome.

## References

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2. Zielinski C, Lang I, Beslija S, et al. Predictive role of hand-foot syndrome in patients receiving first-line capecitabine plus bevacizumab for HER2-negative metastatic breast cancer. *Br J Cancer.* 2016;114(2):163-170.

## Discussion

In this patient, HFS presented with painful erythema and desquamation not only on the palms and soles but also on the dorsum of the hands and feet, and the face, an atypical manifestation of the condition. Normally, HFS is confined to the palms and soles, which endure repetitive friction and pressure. The involvement of the face highlights the need to consider the patient's age, overall health status, and underlying mechanisms that may influence the severity of the condition [1].

The impact of HFS extends beyond immediate discomfort, significantly affecting patients' quality of life and their ability to adhere to cancer treatment protocols. Research shows that patients who develop HFS may experience improved progression-free survival (PFS) and overall survival (OS) compared to those who do not [2]. This paradox suggests that, while HFS is debilitating, its occurrence could be indicative of a more favorable response to treatment in certain patient populations.

## Conclusion

This case highlights an atypical presentation of Grade III HFS associated with docetaxel chemotherapy, affecting not only the typical areas of the hands and feet but also extending to the face. Prompt recognition and management led to a favorable outcome. This case underscores the importance of early intervention and individualized treatment strategies to manage HFS effectively, especially in patients with unusual presentations.



Figure 1: Lesions of the dorsal surfaces of the hands and feet in hand-foot syndrome