

# A Case of Palmoplantar Pustulosis-Like Paradoxical Reaction in a Patient with Hidradenitis Suppurativa Treated with Adalimumab.

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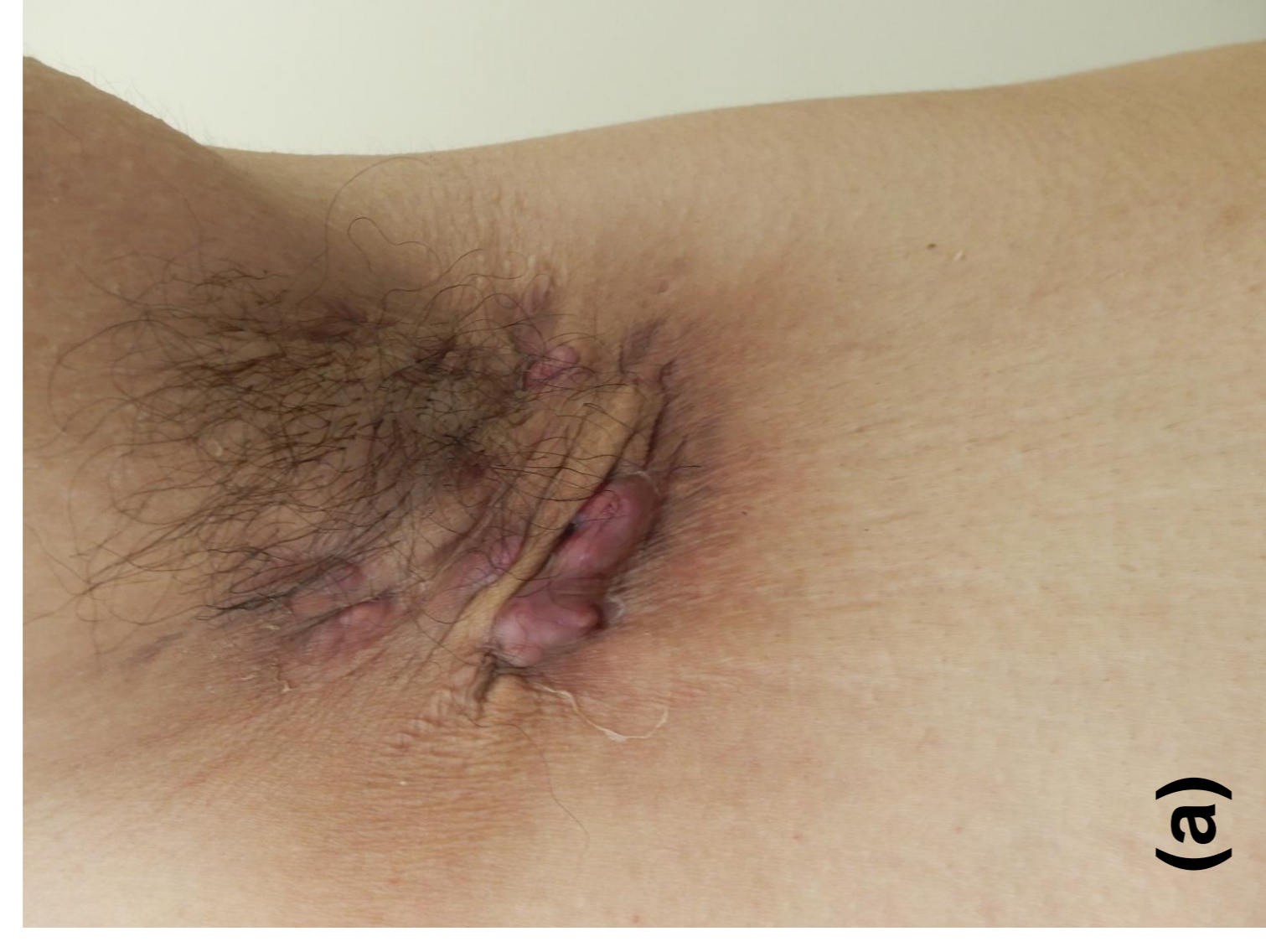
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## Introduction

Adalimumab is a monoclonal antibody against TNF- $\alpha$  that is commonly used for the treatment of psoriasis, rheumatoid arthritis, and inflammatory bowel diseases. In recent years, it has also been employed for treating refractory hidradenitis suppurativa (HS) and contributes to improve patients' quality of life.<sup>1</sup> However, a cutaneous adverse effect known as a paradoxical reaction may occur in some patients.<sup>2</sup> Paradoxical reactions triggered by anti-TNF antibodies manifest as various forms of rashes, such as psoriasis-like, palmoplantar pustulosis (PPP)-like, and generalized pustular psoriasis-like eruptions. Although paradoxical reactions during adalimumab treatment for HS have been reported, all of them were psoriasis-like type.<sup>3</sup> Here, we report a case of a palmoplantar pustulosis-like paradoxical reaction during adalimumab therapy for HS.

## Case Description

A male HS patient in his 50s presented with a history of recurrent suppurative lesions in the buttocks and axillae since his late teens, which had not received any particular treatment. Upon examination at our outpatient clinic, he had indurated masses in the axillae. There were nodules, abscesses, and draining fistulas on the right buttock and the thigh. The patient had a history of heart failure, renal failure, and obesity. Oral antibiotics were ineffective. Therefore, adalimumab treatment was initiated. Although his pain significantly ameliorated approximately in three months, symptoms such as drainage did not, leading to a decision to perform an extensive excision surgery for the lesions on the right buttock and the thigh. After the surgery, there was a marked improvement in the rash, and the patient could maintain a good quality of life even without using adalimumab.



## dermoscopy findings

On examining the left palm with a dermoscopy, multiple yellowish pustules were observed. Pustulo-vesicles characterized by a yellow center and white or transparent surroundings were also seen and highlighted by a red circle (f). The combination of vesicles and pustules on the palms and soles is a common symptom of palmoplantar pustulosis.<sup>4</sup>

## Discussion

Paradoxical reactions during adalimumab treatment often mimic PPP or psoriasis. Psoriasis-like skin rash as a paradoxical reaction of adalimumab has also been reported in Japanese HS patients.<sup>5</sup> While psoriasis-like reactions are frequently reported in HS patients, cases resembling PPP have not been reported in HS patients so far. Considering the relatively high prevalence of PPP in the Japanese population,<sup>6</sup> it cannot be entirely ruled out the possibility that PPP coincidentally developed. However, when vesicles and pustules appear on the palms and soles during the use of anti-TNF antibodies, clinicians should consider the possibility of a paradoxical reaction.

## References

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Conflict of Interest:  
KH has received honoraria for speaker and consultancy from AbbVie, Boehringer Ingelheim, Eisai, Hisamitsu Pharmaceutical, Janssen, Kaken, Kyorin, Kyowa Kirin, Maruho, Meiji Seika Pharma, Mitsubishi-Tanabe, Nihon Pharmaceutical, Novartis, Sanofi, Taiho, and Torii.  
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