Scholars Journal of Medical Case Reports
Abbreviated Key Title: Sch J Med Case Rep
ISSN 2347-9507 (Print) | ISSN 2347-6559 (Online)
Journal homepage: https://saspublishers.com

OPEN ACCESS

Medical Science

Palbociclib-Induced Subacute Cutaneous Lupus

S. Jdii[1*], N. Benchakroun[1], M. Belhouari[1], M. Boughafour[1], G. Hatim[1], T. Chekrine[1], Z. Bouchbika[1], H. Jouhadi[1], N. Taoufiq[1], S. Sahraoui[1]

[1]Mohammed VI Center for Cancer Treatment, IBN ROCHD Hospital, Casablanca, Morocco

DOI: https://doi.org/10.36347/sjmcr.2025.v13i05.004 | **Received:** 14.03.2025 | **Accepted:** 22.04.2025 | **Published:** 02.05.2025

***Corresponding author:** S. Jdii
Mohammed VI Center for Cancer Treatment, IBN ROCHD Hospital, Casablanca, Morocco

Abstract **Case Report**

Targeted therapies offer new alternatives to chemotherapy by sparing healthy tissue and concentrating on cancer cells. In this way, they can break the therapeutic deadlock for some patients. Three CDK 4/6 inhibitors - palbociclib, ribociclib and abemaciclib - are used in a variety of oncological indications and are currently part of the reference treatment for ER-positive and HER2-negative metastatic breast cancer. Cutaneous toxicity has been described with these three compounds, with no improvement in skin lesions after changing the compounds, suggesting a class effect. A 54-year-old woman treated for metastatic breast cancer at the Mohammed VI Cancer Treatment Centre, Ibn Rochd Hospital, between January 2023 and the present day. She was admitted to the department in January 2024 with a photo-distributed skin rash that appeared approximately six weeks after the start of her treatment with palbociclib and letrozole. Skin biopsy was consistent with interface dermatitis with vacuolisation and thickening of the basement membrane, a discrete superficial dermal inflammatory infiltrate, epidermal atrophy and fine mucinous deposits. All the clinical, histological and biological features were compatible with subacute cutaneous lupus. Palbociclib was discontinued and the rash began to clear spontaneously. The most common side effects with these three compounds (palbociclib, ribociclib and abemaciclib) are alopecia, pruritus and maculopapular rash. Other rarer cutaneous side effects have been described, such as erythema multiforme, bullous pemphigoid and subacute cutaneous lupus. As the use of CDK 4/6 inhibitors increases, this skin toxicity must be recognised in order to treat it effectively and facilitate the continuation of oncology treatment.

Keywords: Targeted therapies, Breast cancer, CDK 4/6 inhibitors, Cutaneous toxicity, Cutaneous lupus.

Copyright © 2025 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

Targeted therapies offer new alternatives to chemotherapy by sparing healthy tissue and concentrating on cancer cells.

In this way, they can help some patients break the therapeutic deadlock.

Three CDK 4/6 inhibitors - palbociclib, ribociclib and abemaciclib - are used in a variety of oncology indications, and are part of the current standard of care for ER-positive and HER2-negative metastatic breast cancer [1].

Skin toxicity has been described with all three molecules, with no improvement in skin lesions after changing molecules, suggesting a class effect [2-4].

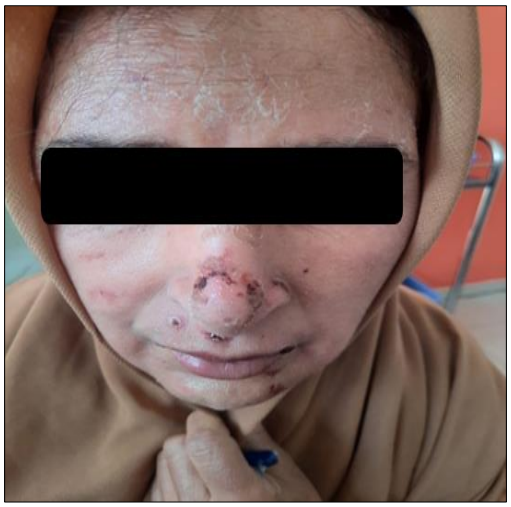
OBSERVATION

A 54-year-old woman treated for metastatic breast cancer at the Centre Mohammed VI des traitements des cancers, Centre Hospitalier Ibn Rochd, between January 2023 and the present day.

She was admitted to the department in January 2024 with a photo-distributed rash that appeared around six weeks after starting her treatment with palbociclib and letrozole.

There was erythema on the cheeks, predominantly on the right side, and multiple, discreetly scaly erythematous patches on the arms, shoulders, upper back and chest.

Some lesions progressed to hypopigmentation.



The skin biopsy performed by the Dermatology team at Ibn Rochd Hospital showed interface dermatitis with vacuolization and thickening of the basement membrane, a discrete superficial dermal inflammatory infiltrate, epidermal atrophy and fine mucinous deposits.

- All clinical, histological and biological features were compatible with subacute cutaneous lupus.
- Palbociclib was stopped and the rash began to disappear spontaneously.
- Patient put on dermocorticoids for **30 days** with regression.
- Hydroxychloroquine as a treatment for subacute lupus was administered for **21 days.**

One month later, the lesions had clearly improved, while the patient continued on letrozole alone, which supported the hypothesis of palbociclib-induced cutaneous toxicity.

Resumption of reduced-dose molecule 100 VS 125mg since March under dermatological supervision: no recurrence of skin lesions 6-month follow-up/stability of his disease.

DISCUSSION

Three CDK 4/6 inhibitors - palbociclib, ribociclib and abemaciclib - are used in a variety of oncology indications, and are part of the current standard of care for ER-positive and HER2-negative metastatic breast cancer [1].

Skin toxicity has been described with all three molecules, with no improvement in skin lesions after switching molecules, suggesting a class effect. The incidence of cutaneous toxicity with CDK 4/6 inhibitors has been estimated at between 14% and 23%. The most common side effects are alopecia, pruritus and maculopapular eruptions. Other rarer cutaneous side effects have been described, such as erythema multiforme, bullous pemphigoid and subacute cutaneous lupus [2-4].

In recent literature, two cases of discoid lupus and two cases of subacute lupus under palbociclib have been described. The time to onset of lesions ranged from five weeks to two months. In both cases, palbociclib was discontinued and resolution achieved within one month. Practitioners also recommended dermocorticoids and hydroxychloroquine as treatment for subacute lupus [5-7].

The data and characteristics of our case are similar to those described in the literature, confirming the cutaneous toxicity of palbociclib and the possible continuation of other treatments such as letrozole, without recurrence of lesions.

With the use of CDK 4/6 inhibitors on the increase, dermatologists need to recognize this skin toxicity in order to treat it effectively and encourage the continuation of oncological treatments [8].

CONCLUSION AND RECOMMENDATIONS

Cutaneous toxicity has been described in the literature with these three molecules (palbociclib, ribociclib and abemaciclib), with no improvement in skin lesions after switching molecules, suggesting a class effect.

The most common side effects are alopecia, pruritus and maculopapular eruptions. Other rarer cutaneous side effects have been described, such as erythema multiforme, bullous pemphigoid and subacute cutaneous lupus.

With the use of CDK 4/6 inhibitors on the increase, this skin toxicity needs to be recognized in order to treat it effectively and encourage the continuation of oncology treatments.

REFERENCES

1. Finn RS et al. Palbociclib and letrozole in advanced breast cancer. N Engl J Med 2016;375(20):1925-36.
2. Base de données publique des médicaments. Fiche info, IBRANCE 100 mg, gélule. https://base-donnees-publique. medicaments.gouv.fr/extrait.php? specid=68016146, consulté le 20 juin. 2021.
3. Base de données publique des médicaments. Fiche info – KISQALI 200 mg, comprimé pelliculé. https:// base-donnees-publique.medicaments.gouv.fr/extrait. php?specid=6– 8343525, consulté le 20 juin 2021.
4. Base de données publique des médicaments. Fiche info – VERZENIOS 100 mg, comprimé pelliculé. https:// base-donnees-publique.medicaments.gouv.fr/extrait. php?specid=64453084, consulté le 20 juin 2021.
5. Spring LM et al. Clinical management of potential toxicities and drug interactions related to cyclin-dependent kinase 4/6 inhibitors in breast cancer: practical considerations and recommendations. Oncologist 2017;22(9):1039-48.
6. Les effets indésirables des anti-CDK4/6 et leur prise en charge dans le cancer du sein Management of adverse effects of CDK4/6 inhibitors in breast cancer F. Guermazi, L. Larrouquere, T. Bachelot. Groupe sénologie, centre Léon- Bérard, Lyon.
7. Lupus cutané subaigu induit par le palbociclib, A. Carrasquilla 1, M. Amini-Adle 2, Hôpital Édouard-Herriot, Lyon, France, Dermatologie, centre Léon-Bérard, Lyon, France.
8. PRÉVENTION ET GESTION DES EFFETS INDÉSIRABLES DES ANTICANCÉREUX PAR VOIE ORALE Avis d'experts Thérapies ciblées par voie orale indiquées dans les cancers du sein Inhibiteurs des CDK 4 et 6: abémaciclib, palbociclib, ribociclib. Version du 12/04/2022, post commission des expertises