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CASE IMAGE

Symmetrical cutaneous rash in two women

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Key Clinical Message

Symmetrical drug-related intertriginous and flexural exanthema, commonly known as "baboon syndrome" due to its typical involvement of the gluteal area, is an erythematous symmetrical rash associated with systemic drug administration.

KEYWORDS

baboon syndrome, doxorubicin, drug reaction, SDRIFE, systemic contact dermatitis

1 | INTRODUCTION

Symmetrical drug-related intertriginous and flexural exanthema (SDRIFE) is characterized by a maculopapular erythematous rash that typically occurs on the gluteal region and skin folds in a symmetrical distribution following systemic exposure to a drug.[1]

A 57-year-old woman presented with a 7-day history of erythematous and pruritic cutaneous rash. Upon examination, erythematous symmetrical patches were observed exclusively in the armpits, submammary fold, groins, and gluteal region (Figure 1). Her medical history revealed stage four breast cancer diagnosed since 2013 with hepatic metastases, and was undergoing chemotherapeutic treatment with doxorubicin for 2 months. She denied any allergies to medications, and the rash began approximately 1 week after the last cycle of chemotherapy. Routine laboratory tests revealed leukocytosis.

A 31-year-old healthy woman presented with the sudden appearance of a purplish rash on her glutes and groins (Figure 2). Upon further questioning, the patient reported being under treatment with amoxicillin 1 g for pharyngodynia.

2 | DISCUSSION

Both patients were diagnosed with SDRIFE, and causative drugs were discontinued. Prescription of topical steroids and antihistamines resulted in complete resolution within 10 days. After oncologic consultation, doxurobicin was discontinued and treatment with gemcitabine was started. After 6 months, the patient is still under treatment without side effects or adverse reactions.

Diagnostic criteria for SDRIFE are[2]:

1. Exposure to a systemically administered drug, either initially or upon repeated dosing.
2. Presence of sharply demarcated erythema in the gluteal area and/or V-shaped erythema in the inguinal/perigenital area.

3. Involvement of at least one other intertriginous/flexural location.
4. Symmetry of the affected areas.
5. Absence of systemic symptoms and signs.

The rash typically develops 1–2 weeks after initiating the offending medication and resolves upon discontinuation.[3,4] It is often referred to as "baboon syndrome" due to its resemblance to the red buttocks of certain apes.[5] The characteristic cutaneous eruptions in specific sites, such as axillae and groin, without systemic symptoms or mucosal involvement, remains difficult to explain. Our patients were both seen at the end of May, which is a relatively hot and humid season in Italy, thus body temperature and friction may have favored the site's involvement. In the past, SDRIFE was considered a form of systemic contact dermatitis (type IV delayed-type hypersensitivity reaction) related to previous sensitization to contact allergens (e.g., nickel, mercury, or topical antibiotics) followed by a reaction after ingestion or injection of the same allergen.[2,6] A patch test gives positive reaction in about 50% of patients although it is not mandatory for the diagnosis, which is mostly clinical, after exclusion of other causes of skin rash.[6] However, more recent cases, including our two patients, suggest SDRIFE can occur without prior contact allergen sensitization, associated with systemic drug administration.[5] Several authors reported common causative drugs include certain antibiotics (e.g., beta-lactams, sulphonamides, and macrolides), anticonvulsants (e.g., carbamazepine and phenytoin), and non-steroidal anti-inflammatory drugs.[5,7,8] Doxorubicin and other anthracyclines are used to treat different hematologic malignancies and solid tumors, with relatively frequent reactions on the skin and the mucosae, including alopecia, mucosal ulcers, papular, and macular eruptions.[9] To our knowledge, this is the first reported case of SDRIFE during doxorubicin chemotherapy, while amoxicillin has been previously associated with SDRIFE and other cutaneous eruptions.[8]

The diagnosis of SDRIFE is based solely on clinical findings, and histological confirmation is not mandatory.

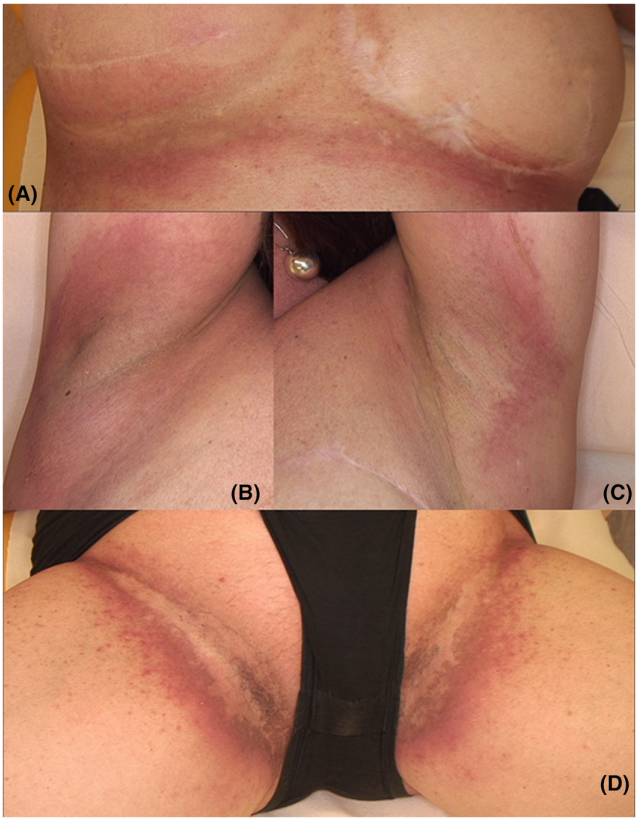

FIGURE 1 Erythematous rash involving the submammary fold (A), the armpits (B, C), and the groins (D).

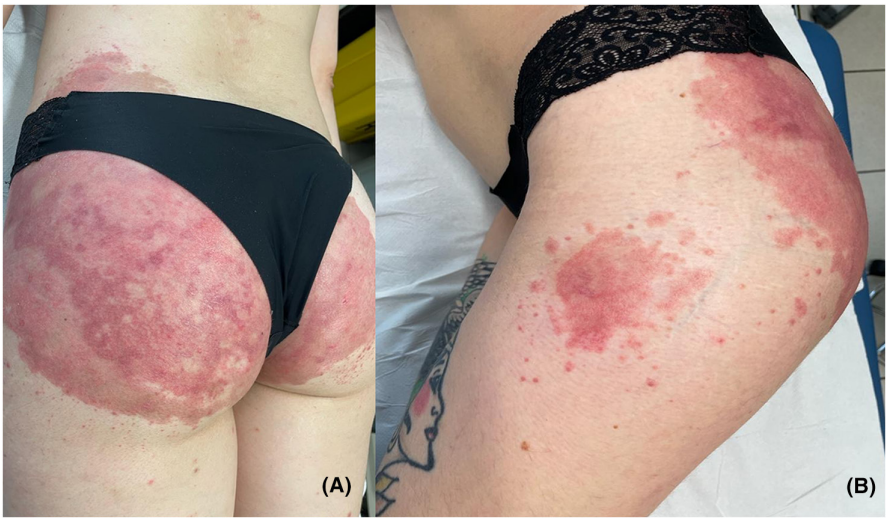

FIGURE 2 Purplish dermatitis on the buttocks (A) and the lateral left thigh (B).

AUTHOR CONTRIBUTIONS

Gionathan Orioni: Data curation; investigation; methodology; validation; writing – original draft. **Maria Camila Velez-Pelaez:** Data curation; supervision; validation; visualization. **Michela V. R. Starace:** Supervision; validation. **Vera Tengattini:** Validation; visualization. **Emanuel Raschi:** Supervision; validation. **Michelangelo La Placa:** Conceptualization; data curation; funding acquisition; investigation; writing – original draft; writing – review and editing.

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None.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest with any financial organizations related to the material discussed in the manuscript.

DATA AVAILABILITY STATEMENT

Data available on request from the authors.

CONSENT

Written informed consent was obtained from the patient to publish this report in accordance with the journal's patient consent policy.

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