A Case of Symmetrical Drug-related Intertriginous and Flexural Exanthema (SDRIFE) to Prednisolone

Chong TY MBBCh [1], Heng YK MBBS MRCP [1]

1 National Skin Centre, Singapore

Introduction

Hausserman defined SDRIFE as an eruption of symmetrical erythema over intertriginous/ flexural skin, following exposure to a systemically administered drug (1). Prednisolone, often prescribed as anti-inflammatory medication, is a rare cause of SDRIFE. We aim to highlight this entity.

Case Report

A 52- year old Chinese female presented to our dermatology service with three episodes of pruritic rashes affecting intertriginous skin. Each episode began with an itchy rash over the left inguinal crease that spread outward, subsequently affecting the right inguinal crease and inframammary areas. These rashes only occurred when she had concurrent tonsillitis and would usually resolve over two weeks.

Prior to her review at the dermatology clinic, she had been diagnosed with intertrigo and given oral itraconazole. However, review of her drug history revealed the onset of rashes consistently coincided with the intake of prednisolone approximately 24 hours prior. During each episode of tonsillitis, she had been prescribed a prednisolone course with daily doses varying between 5mg -20mg OM. Her past medical history included hypertension and her only regular medication was amlodipine. She had no history of atopy.

On examination, erythematous patches were noted over bilateral groin folds and inframammary areas (see Figure 1- 3).

Patch test (PT) to tixocortol pivalate (Chemotechnique Diagnostics) was +++. PTs to prednisolone in 30% petrolatum, budesonide, triamcinolone acetonide, clobetasol propionate, hydrocortisone-17- butyrate and dexamethasone- 21- phosphate disodium salt (Chemotechnique Diagnostics) were negative. Graded oral provocation test (OPT) to prednisolone (15mg in total) reproduced intertriginous rashes within 2 hours, confirming a diagnosis of SDRIFE to prednisolone.

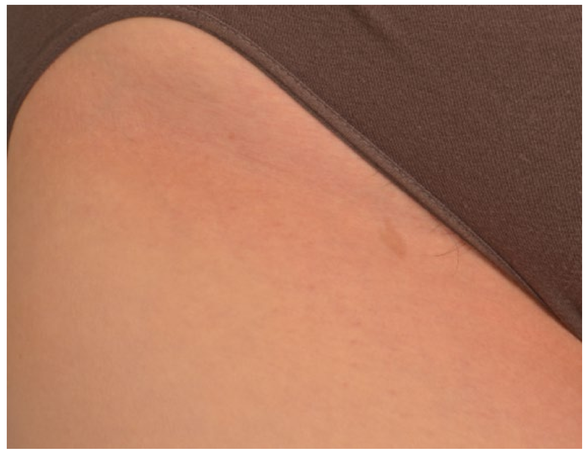

Figure 1: Erythematous patch over the right inguinal crease

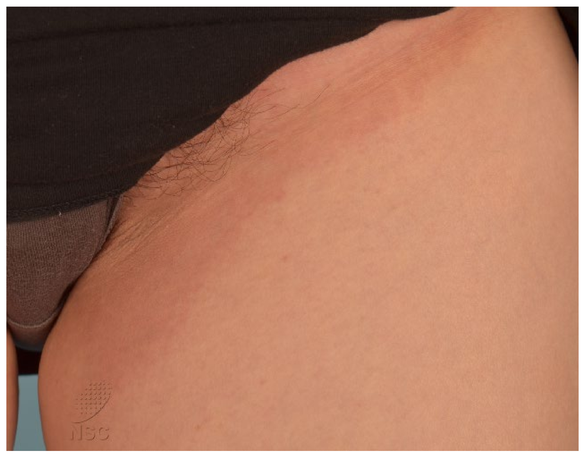

Figure 2: Erythematous patch over the left inguinal crease

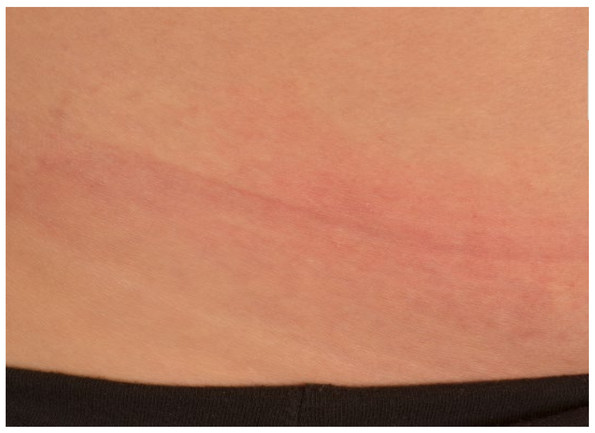

Figure 3: Erythematous patch over the inframammary area

As dexamethasone PT was negative, graded OPT to dexamethasone (4mg in total) was undertaken. No immediate or delayed reaction was noted. Our patient was advised to use dexamethasone as an alternative to prednisolone, if necessary.

Discussion

There are only a few case reports of SDRIFE to corticosteroids in the literature. In 2005, Armingaud et al. reported a case of SDRIFE to oral betamethasone (2). In 2006, Treudler et al. reported a case of SDRIFE to prednisolone, methylprednisolone, cloprednol, dexamethasone, betamethasone, and hydrocortisone (3).

OPTs remain the gold standard for determining drug causality in SDRIFE. With regards to skin tests, Barbaud estimates that PTs are useful in 52-82% of cases. Barbaud and Treudler et al's publications suggest that delayed readings of skin prick tests and intradermal tests only have limited value (3, 4).

Conclusions

This case highlights that, although uncommon, prednisolone can cause SDRIFE. Dermatologists should be aware of this possibility as prednisolone is frequently prescribed. PTs, coupled with OPTs, can aid diagnosis and guide the selection of alternative steroids which the patient may tolerate.

References

1) Hausermann P, Harr T, Bircher AJ. Baboon syndrome resulting from systemic drugs: is there strife between SDRIFE and allergic contact dermatitis syndrome? Contact dermatitis. 2004;51(5-6):297-310.
2) Armingaud P, Martin L, Wierzbicka E, Esteve E. [Baboon syndrome due to a polysensitization with corticosteroids]. Annales de dermatologie et de venereologie. 2005;132(8-9 Pt 1):675-7.
3) Treudler R, Simon JC. Symmetric, drug-related, intertriginous, and flexural exanthema in a patient with polyvalent intolerance to corticosteroids. The Journal of allergy and clinical immunology. 2006;118(4):965-7.
4) Barbaud A. Skin testing and patch testing in non-IgE-mediated drug allergy. Curr Allergy Asthma Rep. 2014;14(6):442-.