



# Griseofulvin associated with drug reaction with eosinophilia and systemic symptoms (DRESS)

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## INTRODUCTION

We present a case of drug reaction with eosinophilia and systemic symptoms (DRESS) syndrome associated with griseofulvin, which, to our knowledge, has not been previously reported.

## CASE REPORT

A 69-year-old woman otherwise well, with no known allergies and not on any regular medications, was prescribed 500 mg griseofulvin daily to treat tinea interdigitale. Six days later she noticed red papules appearing on her torso. Over the next 4 days, her eruption progressed to involve her limbs, and she became febrile, lost her appetite, and felt generally unwell. Griseofulvin was ceased, and she presented to the emergency department of a tertiary hospital and was admitted under a medical team. On admission, she was found to be febrile (37.9°C) and lymphopenic with mild nephritic syndrome and facial swelling. During her admission, the patient had an eosinophilia ( $1.06 \times 10^9/L$ ), palpable lymph nodes in the cervical and inguinal regions, and extension of her eruption, which was predominantly a macular erythema over her trunk and proximal limbs (Fig 1). There was no mucosal involvement. According to the Bocquet et al and RegiSCAR criteria, this patient met a diagnosis of DRESS. Skin biopsy found interface change, superficial and perivascular chronic inflammatory cell infiltrate, and moderate numbers of interstitial eosinophils, consistent with a drug eruption (Fig 2). The patient was observed over the next few days until her renal function and hematologic derangement normalized. On review

### Abbreviation used:

DRESS: drug reaction with eosinophilia and systemic symptoms

10 months after recovery she had had no further episodes.

## DISCUSSION

DRESS is a rare but serious adverse drug reaction presenting with variable signs of both cutaneous and internal organ involvement.<sup>1-3</sup> Generally, symptoms develop 2 to 8 weeks after initiation of the causative medication.<sup>4,5</sup> Drugs most commonly implicated include antiepileptics, allopurinol, sulphonamides, minocycline, and nonsteroidal anti-inflammatory drugs. Our patient had a reaction faster than usual for DRESS. Despite this fast reaction, enough criteria were met to diagnose DRESS with both Bocquet et al and RegiSCAR criteria.<sup>1-3,6</sup>

Griseofulvin has not been previously reported to be associated with DRESS. It is known to cause phototoxic and photoallergic eruptions. The medical literature is studded with case reports of other forms of drug hypersensitivity secondary to griseofulvin, including serum sickness-like reaction,<sup>7</sup> acute generalized exanthematous pustulosis,<sup>8</sup> fixed drug eruption,<sup>9</sup> subacute cutaneous lupus erythematosus,<sup>10</sup> and toxic epidermal necrolysis.<sup>11</sup>

The United Kingdom Medicines and Healthcare products Regulatory Agency lists griseofulvin as being reported to cause a variety of hypersensitivity

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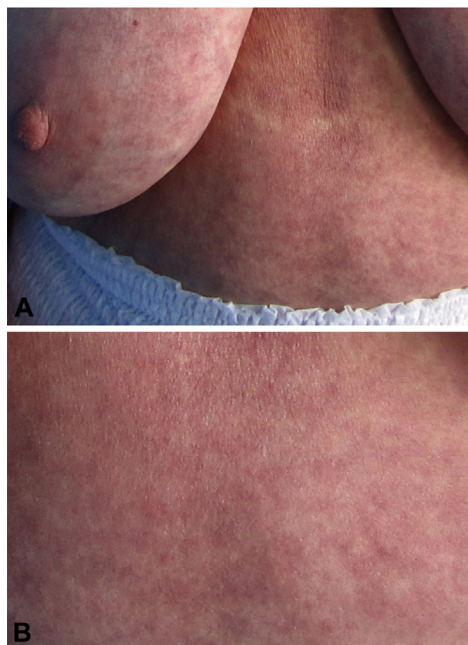
Conflicts of interest: None declared.

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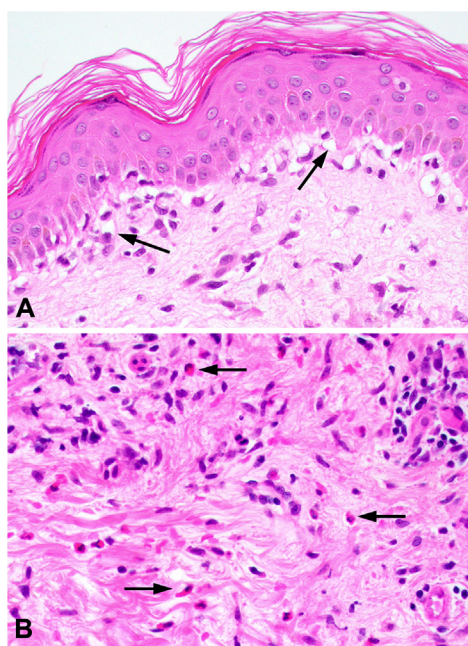
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**Fig 1.** **A**, Diffuse macular erythema almost confluent over the torso. **B**, Closer view of erythema on torso.



**Fig 2.** **A**, Widespread basal vacuolar change (arrows) with focal basal lymphocyte exocytosis, involving an epidermis of normal thickness, with retained basket weave pattern of keratin. **B**, Dermal edema and a moderately heavy superficial perivascular lymphohistiocytic infiltrate with moderate numbers of interstitial eosinophils (arrows).

reactions and skin disorders. These reactions include bullous disorders (particularly erythema multiforme), urticaria, various exanthems, and exfoliative dermatitis. DRESS is not listed.<sup>12</sup> The Australian

Therapeutic Goods Administration Database of Adverse Events Notifications has a similar listing and also does not report DRESS with griseofulvin.<sup>15</sup> The United States Food and Drug Administration emphasizes the risk of erythema multiforme, Stevens-Johnson syndrome, and toxic epidermal necrolysis but does not list DRESS under the Severe Skin Reactions warning for griseofulvin.<sup>14</sup>

Clinically, our patient's cutaneous eruption and systemic features were most in keeping with a diagnosis of DRESS, despite the short timeline. This case reminds the clinician to consider a diagnosis of DRESS for any drug, even in the absence of a classic drug cause.

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