SDRIFE – Another Acronym for a Distinct Cutaneous Drug Exanthema: Do We Really Need It?

Peter Häusermann Andreas J. Bircher

Allergy Unit, Department of Dermatology, University Hospital Basel, Basel, Switzerland

The correct morphological diagnosis of cutaneous adverse drug reactions is as critical for general practitioners as for specialists. Discrimination between mild and severe, potentially life-threatening conditions is crucial to initiate appropriate steps with respect to diagnosis, treatment and prophylaxis [1]. Accordingly, early detection and differentiation of potentially lethal conditions, such as toxic epidermal necrolysis (TEN) from common exanthematous (i.e. morbilliform) drug eruptions, is of vital importance.

During the last few years, better understanding and characterization of such drug-induced syndromes has led to the use of acronyms based mainly on clinical symptoms and signs, evolution and some laboratory features. Maculopapular and pustular exanthema may be mild or associated with organ involvement or hematological disorders. On the other hand, bullous exanthema encompasses a spectrum from multilocular fixed drug eruptions (FDE) and Stevens-Johnson syndrome (SJS) to potentially life-threatening TEN. Other severe reactions are drug hypersensitivity syndrome, also known as drug rash with eosinophilia and systemic symptoms (DRESS), with potentially lethal hepatopathy and acute generalized exanthematous pustulosis (AGEP), both associated with high fever and leukocytosis. It is important to recognize these severe reactions early to ensure adequate treatment and better prognosis.

Such acronyms help physicians to memorize the different types of adverse drug reactions [2, 3]. Additional benefits of the precise definition of such drug reaction subtypes are the introduction of validated scores, e.g. by the EuroSCAR study group for AGEP [4], SCORTEN for TEN [5] as well as the implementation of recently proposed criteria for DRESS [3, 6]. Overall, these scores and diagnostic criteria enhance the diagnostic accuracy of these distinct drug eruptions and help to evaluate patient groups more precisely in retrospective and prospective studies.

In 1984, Andersen et al. [7] published 3 cases showing a sharply demarcated gluteal and intertriginous erythema with positive patch tests to amoxicillin, nickel and mercury, respectively. Based on the resemblance of the bright red gluteal erythema to the back side of the baboon, they coined the term baboon syndrome (BS). This term – and meanwhile approximately 10 other terms (table 1) that have been used in such cases – are applied to patients systemically exposed to contact allergens, such as mercury [8], as well as to individuals reacting with this particular pattern to systemic drugs [9]. In this issue, Arnold et al. present another educational BS case report [10]. The reaction, proven by skin and provocation tests and accidental reexposure, occurred after exposure to iodinated contrast media.

In our recent review, we proposed SDRIFE (symmetrical drug-related intertriginous and flexural exanthema) as an acronym for this relatively uncommon but distinct cutaneous adverse drug reaction [9]. This term is easily memorized, and SDRIFE is diagnosed based on only 5
clinical criteria. All reviewed patients showed a rather stereotypical clinical presentation: a sharply defined V-shaped erythema in inguinal/genital and gluteal/peri-anal areas and involvement of at least one other large body fold. Sometimes the lesional skin showed tiny papules, pustules, vesicles and rarely bullae. Involvement of the palmae, plantae, face or mucosa was rarely reported. Blood chemistry and hematology were normal and there were no systemic symptoms. However, histology was variable. Predominance of superficial perivascular infiltrates, mostly composed of mononuclear cells, was a constant feature. Most reactions were associated with aminopenicillins, others with non-β-lactam antibiotics. SDRIFE therefore shows high homogeneity for primary cutaneous lesions, distribution and course but some heterogeneity with respect to histology, skin test results and in vitro investigations. In contrast to most other allergic drug reactions, there is a surprising predominance of affected males. Overall, this acronym permits a simple recognition of SDRIFE as a separate entity within the spectrum of drug eruptions. It is in line with commonly used abbreviations, such as FDE, TEN, SJS, AGEP and DRESS.

Contrary to this easily memorizable acronym, we believe that the term BS is inappropriate and problematic for several reasons: First of all, BS is historically equated with gluteal erythema induced by systemic absorption of mercury and other contact allergens. Secondly, as shown in our recent review, BS does not reflect the entire range of clinical symptoms and signs, particularly if elicited by systemic drugs [9]. Thirdly, according to several investigators, BS incorporates a broad spectrum of diseases, encompassing allergic contact dermatitis syndrome, drug eruptions and a variety of other intertriginous disorders. Moreover, in our opinion, the use of such analogies fails to respect ethical and cultural sensitivities.

In conclusion, we think that there is sufficient evidence to propose a new acronym – SDRIFE – for an uncommon but distinct drug exanthema, replacing and re-defining the overused, inexact catchword BS. This acronym’s D is a reminder of the drug etiology. The S, I, F and E may help nonspecialists to remember the main clinical features, i.e. the symmetrical intertriginous and flexural involvement of the exanthema. SDRIFE, unlike BS, is a neutral term that avoids ethically and culturally offensive comparisons with an animal and, most importantly, identifies a relatively benign particular type of drug eruption, facilitating the diagnosis, prognosis and management of individual patients [10]. We believe this acronym is a useful addition to the existing terms.

References