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Letter to the Editor Regarding "DRESS syndrome on the background of adding meropenem to carbamazepine therapy: a clinical case"

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To the editor

Drug-induced reaction with eosinophilia and systemic symptoms (DRESS) is a severe condition with diagnostic criteria established by international Registry of Severe Cutaneous Adverse Reactions (RegiSCAR)[1] considering a score system based on clinical and laboratory findings [1–5].

We appreciated the report by Ilina Y.V. et al. published in this Journal [3] about the DRESS syndrome that developed in a 29-year-old woman following the postoperative association of meropenem with carbamazepine to the management of focal epileptic seizures and postictal right hemiparesthesia [3].

The manifestations of the DRESS syndrome appeared 8 days after starting the antibiotic, and carbamazepine was suspended, but the diagnosis was only confirmed by the RegiSCAR criteria about a month later. Her treatment schedule with methylprednisolone was then modified by 1 mg/kg body weight, which resulted in clinical and laboratory improvement, and five days later she was discharged to home [3]. Less than a month later, she presented mucosal HSV type 6 and CMV lesions on the nose and lips, that were controlled by administration of valacyclovir and a reduced dosage of methylprednisolone. The authors highlighted the increased diagnostic challenges due to association of administered drugs; the misdiagnosis with diverse similar entities; the longstanding time to appear the first symptoms; and the main role of the prompt interruption of the possible causal agent of the DRESS syndrome [3]. In this setting, the objective of the present letter is to comment on two other recent reviews on the DRESS syndrome, [1, 2] besides some Brazilian case studies of this challenging condition [4, 5].

Alotaibi M. reviewed the pathogenesis and treatment of this ominous disturbance, that may affect 2.18 per 100,000 people, 55% females, related to antibiotics (74%) or antiepileptics (20%), with almost 95% of hospital admissions, 3% of mortality rate, and high burden on health costs [1]. His comments on recent pathophysiology advances included human leucocyte antigen haplotypes, interleukin-5, thymus- and activation-regulated chemokine, macrophage-derived chemokine, besides and the activation of the Janus kinases-signal transducer and activator of transcription proteins; and cyclosporine was considered a useful tool to get good outcomes of the DRESS syndrome control [1].

Calle A.M. et al. very recently reviewed the main findings associated with the epidemiology, pathophysiology, clinical and laboratory diagnosis, and management of the DRESS syndrome [2]. Phenytoin, carbamazepine, phenobarbital, sulfonamides, dapsone, piroxicam, ibuprofen, diclofenac, beta-lactam antibiotics, vancomycin, allopurinol, minocycline and antiretrovirals are the most common etiologic factors, although in up to 20% of cases, the causative agent is not determined [2]. The diagnosis is frequently late; hepatic failure is a major cause of death; and hyper eosinophilia, thrombocytopenia, pancytopenia, leukocytosis, and coagulopathy are signs of the poor prognosis [2].

Brazilian authors reported two cases of DRESS syndrome. An 18-year-old woman taking phenytoin had fulminant hepatitis and refractory shock [4]; and a 49-year-old man using alopurinol plus diclofenac who had heart involvement but improved with the corticosteroid immunosuppression [5].

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[1] RegiSCAR. European Registry of Severe Cutaneous Adverse Reactions (SCAR) to Drugs and Collection of Biological Samples. http://www.regiscar.org/ (Date of access: 02.10.2023).

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