

## Drug reaction (with eosinophilia and systemic symptoms)

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### Abstract

We report the case of a 58 years old woman receiving therapy for peripheral neuropathic pain with Paracetamol and pregabalin 150 mg bid (wrist and right hand). After neurological evaluation, carbamazepine 200mg tid is prescribed. A few hours after the first intake, she presented fever and massive angioedema of the face and neck, with subsequent rapid systemic involvement (hands, feet, lower limbs). In the ER, she was treated with cortisone and antihistamines and after observation and partial improvement, she was discharged home with PPI, prednisolone and cetirizine. The fever disappeared, but due to the persistence of joint pain and systemic angioedema, another observation was made (4 days). The examination showed extensive angioedema of the face and oral and vaginal mucous membranes, upper limbs, hands and lower limbs bilaterally. The abdomen showed hepatomegaly and lymphadenomegaly of the inguinal chain, bilaterally. Physical examination otherwise negative. On a thorough history, she vaguely recalled a previous mild reaction to carbamazepine (7 years earlier). Immediately excluding the IgE mediated genesis, given also the poor response to therapy with antihistamines and cortisone, in order to evaluate any organ damage and exclude concomitant pathologies, laboratory, microbiological and instrumental tests, suspension of pregabalin and carbamazepine were prescribed, addition of enoxaparin and absolute rest. Laboratory tests showed a significant increase in eosinophils (21.8% on 9.07 WBC), lymphocytosis, increase in AST,

ALT, CPK-MB, LDH, CRP > 10-fold with normal PCT and d-dimer; substantially normal also microbiological and instrumental examinations (on CT modest reactive lymphadenopathy of the neck and groin). After about 10 days the symptoms resolved and Within 3 weeks the tests returned to normal.

DRESS syndrome is a serious, potentially fatal syndrome related to an idiosyncratic drug reaction. Lymphadenomegaly is evident in ½ the cases and angioedema is present in ¾ of the patients, often with skin lesions of various degrees and types. Atypical presentations with cardiac, neurological, gastrointestinal and endocrine damage are reported. The diagnosis of DRESS syndrome requires a high level of suspicion and the differential diagnosis includes a large number of neoplastic, infectious, immunoreumatological diseases that necessarily must be excluded. Treatment of DRESS is essentially supportive and symptomatic with the recommended use of corticosteroids or Ig in the presence of systemic symptoms or kidney or lung damage. In resistant cases, plasmapheresis could be a therapeutic option. The long-term sequelae of DRESS syndrome (autoimmune thyroiditis, diabetes mellitus, systemic sclerosis and SLE) are described. Indefinite changes in HLA in some ethnic groups appear to favor the onset of the disease. There are no reports of multiple reactivity versus other drugs for patients with a history of DRESS. Allopurinol, carbamazepine, phenobarbital, sulfasalazine, lamotrigine, Vancomycin, sulfonamides are the drugs most often responsible for DRESS.