

MEETING ABSTRACT

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Allergic diseases of the skin and drug allergies – 2028. Vitamin D insufficiency in dress syndrome

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Background

Vitamin D deficiency (VDD) is widespread and on the increase. A few reports showed VDD has been implicated cutaneous symptoms such as rash and urticaria/angioedema and drug reaction with eosinophilia and systemic symptoms (DRESS). We evaluated the association of serum 25-hydroxyvitamin D₃(25[OH]D₃) and DRESS.

Methods

36 patients diagnosed as DRESS were prospectively collected from September 2010 to April 2012. The diagnostic criteria in this study was used from our previous report.

Results

Study patients consisted of 16 men (44.4%) and 13 women (55.6%). The most common causative drugs were antibiotics (17, 47.2%) and anticonvulsants (9, 25%), followed by non-steroidal anti-inflammatory drugs (5, 13.2%), antituberculosis drugs (4, 11.1%), undetermined agents (4, 8.9%), others (2, 5.6%) and undetermined (2, 5.6%). The mean serum 25[OH]D₃ level of the total subjects was 11.96 ± 10.27 ng/ml. Thirty-five patients (97.2%) had low vitamin D levels; 19 were severe VDD (<10 ng/mL, group I), and 16 vitamin D insufficiency (10-30 ng/mL, group II). The mean serum 25[OH]D₃ level of each group was 7.02 ± 1.65 ng/ml and 14.46 ± 3.56 ng/ml, respectively. There were no significant differences in sex, age, culprit drugs, organ involvements and the use of systemic steroids between two groups, except admission days (96.21 ± 89.66 vs. 37.56 ± 40.43, p=0.034). The level of serum 25(OH)D₃ was inversely correlated with admission days (r=-0.387, p=0.02).

Conclusions

Vitamin D insufficiency was noted in patients with DRESS. Further studies are needed in large samples and to evaluate the vitamin D roles in drug hypersensitivity.

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