



ADVERSE DRUG REACTIONS, INCLUDING SJS, TEN

PROCALCITONIN AS A DIAGNOSTIC INDICATOR FOR SYSTEMIC BACTERIAL INFECTIONS IN PATIENTS WITH STEVENS-JOHNSON SYNDROME/TOXIC EPIDERMAL NECROLYSIS

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Introduction: Elevated serum procalcitonin(PCT) level has been reported to be a diagnostic index in systemic bacterial infections, but it can also increase in some non-infectious inflammatory diseases. Stevens-Johnson syndrome(SJS)/toxic epidermal necrolysis(TEN) is a rare immune-mediated cutaneous mucosal reaction which is susceptible to bacterial infections and may has elevated PCT levels. The value of serum PCT has not been assessed in series of SJS/TEN patients.

Objective: To investigate the predictive efficacy of PCT for systemic bacterial infection in patients with Stevens-Johnson syndrome(SJS)/ toxic epidermal necrolysis(TEN).

Materials and Methods: The clinical data and the indexes of PCT and C-reactive protein (CRP) of 42 patients with SJS/TEN were retrospectively analysis. Bacterial infection was diagnosed by positive culture results or typical symptoms and signs combined with positive response to antibiotics. The 42 patients were divided into systemic infected group, skin surface infected group and non-infected group according to the infection status. Receiver operating characteristic (ROC) curves were used to determine the predictive efficacy of PCT for systemic bacterial infection in SJS/TEN patients.

Results: 1. The age and SCORTEN score of patients in systemic infected group were higher than those in other two groups ($P < 0.05$). 2. The level of PCT in systemic infected group was significantly higher than those in other two groups ($P < 0.05$). There was no significant difference in CRP between the three groups. ROC curve analysis revealed that the cutoff PCT level of 0.65ng/ml had the optimal predictive efficacy with sensitivity and specificity of 84.6% and 89.7%. 3. PCT and SCORTEN score were positively correlated($P < 0.05$).

Conclusions: PCT level is significantly higher in SJS/TEN patients with systemic bacterial infection than in those with just superficial skin infection and non-infected. PCT is superior to CRP in detecting systemic bacterial infection in SJS/TEN patients.

