

00425 Bacteremia in Stevens-Johnson Syndrome and Toxic Epidermal Necrolysis

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Aims: Stevens-Johnson syndrome (SJS) and toxic epidermal necrolysis (TEN) are rare severe mucocutaneous adverse reactions characterised by extensive epidermal detachment and necrosis. The mortality rate is high ranging from 25-35% for TEN and 1-5% for SJS. Sepsis is the main cause of death. However, to date, knowledge remains poor in predicting which patients will develop bacteremia on admission. Furthermore, recognition of bacteremia when it occurs, and prompt institution of antibiotics is challenging as the presence of systemic inflammatory response syndrome mimics the usual signs of infection. Hence, we aim to identify the factors on admission that predict which patients will develop bacteremia subsequently and the biomarkers that can predict when a patient is having bacteremia.

Methodology: A retrospective study of consecutive patients admitted over a 14-year period (2003-2016) for SJS, SJS/TEN overlap or TEN to a tertiary referral centre was performed. Patient demographics, comorbidities, haemodynamic parameters and laboratory results taken within the first 24 hours of admission were reviewed to predict development of bacteremia. Presence of fever and laboratory results taken at the time of blood culture were reviewed to predict a positive blood culture.

Result: The study included 176 patients, classified as having SJS (n=59), SJS/TEN overlap (n=51) and TEN (n=66). 52 patients (29.5%) developed bacteremia during hospitalisation. Early predictors of bacteremia in multivariate analysis were glucose ≥ 8.05 mmol/L, haemoglobin ≤ 12.45 g/dL, bicarbonate ≤ 22.55 mmol/L and maximum body surface area $> 10\%$. A risk score was constructed based on these factors. The Area-Under-the-Curve (AUC) was 0.846 (95% CI 0.784-0.907) with good calibration (Hosmer-Lemeshow statistic, $p=0.449$). Multivariate analysis showed that absence of fever and procalcitonin ≥ 0.305 ug/L were predictive of positive blood culture.

Conclusion: The risk score is reliable for early prediction of bacteremia, which would help to delineate higher risk groups for closer monitoring and timely interventions.