

## **ABSTRACT**

### **BACKGROUND**

Stevens-Johnson syndrome (SJS) and Toxic Epidermal Necrolysis(TEN) are severe cutaneous adverse reactions of major concern because of its high mortality. The prognosis of Stevens-Johnson syndrome and Toxic Epidermal necrolysis is widely assessed with SCORTEN (SCORE of TEN). Although, it is a largely useful scale, the predictive ability is still variable. Few modifications are suggested to the existing scale based on our study.

### **OBJECTIVES**

This study was conducted to assess the clinicoetiological profile and outcome of SJS and TEN and to evaluate the validity of SCORTEN in assessing the prognosis in South Indian population.

### **METHODS**

This prospective observational study was conducted in the Department of Dermatology, Venereology and Leprosy, Tirunelveli Medical College from January 2016 to June 2017 after obtaining Institutional ethical committee clearance. All the patients were admitted. Detailed history, examination, investigations and treatment details of the patients were recorded in a pre-set

questionnaire. SCORTEN's accuracy in predicting the mortality was assessed on day 1, 3 and 5 of admission. Conservative management and corticosteroids were the main stay of therapy in our study. Intravenous immunoglobulin was used in one patient. Patients were followed up for 3 months after discharge and follow up changes were noted.

## **RESULTS**

The incidence of SJS/TEN among other drug reactions was 29.5%. The most common age group affected was 30-49years (41.1%), with male preponderance (76.5%). The age range of patients was 6 and 67 years. TEN (64.7%) was the predominant spectrum followed by SJS and SJS-TEN Overlap in 17.6% each. Anticonvulsants (47%) were the commonest causative drug, followed by analgesics (35%) and antibiotics (11%). The validity of SCORTEN was same on day 1, 3 and 5. There was good agreement between the actual and predicted mortality on all three days. Three patients (17.6%) (2 SJS-TEN Overlap with score of 5 and 6, 1 TEN with score 6) died in our study. All of them had thrombocytopenia. 2SJS-TEN Overlap patients, although with less BSA involvement succumbed to death because of CKD as co-morbidity. All survivors had a score of 4 or less. Four patients had 100% BSA involvement but only one with co-morbidity (carcinoma lung) died. The predicted mortalities were 0.417,

1.836 and 2.574 and the observed mortalities were 0, 2 and 1 in SJS, SJS-TEN Overlap and TEN respectively.

## **CONCLUSION**

Analysis of SCORTEN on single day either day 1, 3 or 5 is as useful as the serial analysis. SCORTEN gave a significant estimation of mortality in SJS-TEN Overlap patients, whereas it gave an overestimation of mortality in TEN patients. Inclusion of new parameters like thrombocytopenia and pulmonary infiltrates was recommended by us. Further studies on a larger scale, is needed to validate the modified SCORTEN proposed by us.

**Keywords:** Stevens-Johnson syndrome, Toxic Epidermal Necrolysis, SCORTEN