

**In a Little While: Anticipating Changes in Bundled Payments For the Treatment of Patients with Acute, Life-threatening Dermatologic Emergencies, Through Prevention of Healthcare Associated Infections.**

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**Introduction:** Stevens-Johnson syndrome (SJS) and toxic epidermal necrolysis (TEN) are part of the same clinical syndrome that represents a medication-induced desquamation disorder. In 1922 Drs. Stevens and Johnson first described SJS as an acute mucocutaneous syndrome presenting in two young boys.<sup>1,2</sup> Patients admitted to a burn center suffering from the Stevens-Johnson syndrome to Toxic Epidermal Necrolysis (SJS-TEN) spectrum are typically considered to have high hospital morbidity and mortality. Little is known about patients admitted to a burn center suffering from non-bullous Skin Disorders (SD). This group includes severe rashes, non-healing wounds, erythema multiforme, and unknown skin lesions requiring hospitalizations. We compared these two group's costs, mortality, and the effect of Healthcare-Associated Infections (HAI) on outcomes to better define this patient population.

**Methods:** A post-hoc analysis of prospectively collected data was performed on 445 patients who had a diagnosis of a dermatologic condition requiring hospitalization who were admitted to our 36 bed ABA accredited burn center over the last 10 years. These charts, divided into SJS-TEN and SD, were cross-referenced with the hospital wide infectious control database to identify patients who suffered from HAIs that met the CDC National Healthcare Safety Network surveillance definitions. Statistical analysis was performed using two-tailed t-test, or chi-square, for nominal and categorical variables, respectively.

**Results:** There were 316 patients in the SD group and 129 in the SJS-TEN. SD patients had significantly higher ICU and ventilator days, compared to SJS-TEN. When HAI was present, both groups had a significant increase in cost, and SJS-TEN patients had increased mortality. There was no difference in overall mortality, %TBSA or incidence of HAI between the two patient cohorts.

**Conclusion:** Clinicians treating non-SJS-TEN Skin Disorder patients in burn centers should be aware of a high mortality rate, susceptibility to HAI and the potential for a prolonged ICU stay and longer ventilator days. With bundled payments on the horizon, health care facilities may not be able to cover cost of care in the presence of HAI in either patient population.

**References:**

1. Harr T, French L. Toxic epidermal necrolysis and Stevens-Johnson syndrome. *Ophanet J Rare Dis*, Dec 2010; 5:39: 1-11.
2. Uguburo, AO, Temiye EO, Ilombu CA. A 12-year retrospective study of non-burn skin loss(burn-like syndromes) at a tertiary burns unit in a developing country. *Burns*, 2008; 34(5): 637-43.