

740 **Cyclosporine in Stevens Johnson Syndrome & Toxic Epidermal Necrolysis: Experience from a Tertiary Care Center**

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Introduction: Stevens-Johnson syndrome and toxic epidermal necrolysis (SJS/TEN) are rare severe cutaneous adverse reactions associated with high morbidity and mortality, however, there lacks an established treatment protocol. Treatment with intravenous immunoglobulin (IVIg) has demonstrated mixed success rates in improving mortality. More recently, cyclosporine (CsA) has been found to have a promising role in management of SJS/TEN owing to its potent anti-apoptotic activity. We present 3 patients with SJS/TEN treated in our burn unit with CsA; all of them demonstrated clinical improvement.

Methods: We conducted a retrospective analysis of patients who were hospitalized with the diagnosis of SJS/TEN in a specialized burn center in the year 2020. Data regarding clinical factors, causative agent(s), disease severity, treatment received, and outcome were collected on chart review. SCORTEN and ABCD-10 prognostic scores were calculated for each patient at the time of admission. All patients were evaluated by a dermatologist and started on CsA at a dosage of 5 mg/kg daily given in 2 divided doses. Predicted mortality rate was compared with observed mortality rate to assess treatment outcomes.

Results: A total of 3 patients were identified with a mean age of 48.33 ± 16.50 . All patients had TEN with an average initial BSA involvement of 56.67 ± 20.21 and peak BSA involvement of 63.33 ± 25.17 . Lamotrigine was the presumptive causative drug in each case with an average duration of time from starting the medication to symptom onset of 19.3 days. Patients received CsA on average 7 days after symptom onset. Most of our patients had oral (100%), ocular (100%), genital (100%), and esophageal (33.3%) involvement during hospitalization. The observed mortality rate of 0% was lower than that predicted by SCORTEN (12.2% to 32.4%) and ABCD-10 (5.4% to 12.3%). No patients developed complications during admission. All patients had minimal wound care needs on discharge as most of the involved areas were healed by then.

Conclusions: Our study sheds light on a possible beneficial role of cyclosporine for the treatment of SJS/TEN and reinforces the necessity of further prospective studies to solidify treatment guidelines.

741 **Burn Injury Elevates the Risk of Sepsis in Pregnant Women**

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Introduction: Pregnancy naturally strains a woman's body, and is exacerbated by additional stressors, such as severe burn. This study seeks to establish a national incidence rate of burns during pregnancy, as well as categorize the patients epidemiologically and by percent total body surface area (%TBSA) burned. We posit that pregnancies complicated by burn injuries have worse outcomes in mortality and comorbidities in comparison to pregnancies not complicated by burns.

Methods: Using an electronic medical record database, TriNetX, a retrospective cohort study was performed to identify burned pregnant patients within the last 20 years. The burn cohort included all pregnant women aged 12-55 who experienced a burn injury on the same day as pregnancy or anytime within nine months after the first record of pregnancy. The non-burned cohort included women who did not experience a burn within nine months of the recorded pregnancy. Outcomes compared were sepsis, pregnancy with abortive outcome, ectopic pregnancy, spontaneous abortion, complications of labor and delivery, preterm labor, postpartum hemorrhage, maternal mortality, and acute respiratory distress syndrome (ARDS). After matching for age at pregnancy, each outcome was compared at one, three, and five years after pregnancy. Risk ratios (RR) with a 95% confidence interval (CI) were used to compare cohorts, and a p-value < 0.05 was deemed significant.

Results: The TriNetX database contained 21,438,975 females between the ages of 12-55. Among these, pregnant women with burn injuries were found to have an incidence of 4.32% in the United States in the last 20 years (pregnant females with burn n = 4,721; females with burn n = 109,294). Of burns categorized by %TBSA burned, 84% were between 1-10%. Within one year of pregnancy, burned patients have a three-fold increase in risk of development of sepsis compared to non-burned women (RR = 3, 95% CI = 1.518, 5.929), but are less likely to experience pregnancy with abortive outcome (RR = 0.612, 95% CI = 0.509, 0.735), complications during labor and delivery (RR = 0.863, 95% CI = 0.803, 0.928) or spontaneous abortion (RR = 0.707, 95% CI = 0.556, 0.899).

Conclusions: Pregnancy complicated by burn injury has a lower national incidence rate than the generally accepted 7% of reproductively aged females. Burned patients were more likely to experience sepsis than their non-burned counterparts one year after pregnancy, however, risk of maternal mortality was the same between the burned and non-burned patients within one year after pregnancy with a curious decrease in miscarriage and labor and delivery complications.