Section: Miscellaneous

Original Research Article

SPECTRUM AND OUTCOMES OF SEVERE CUTANEOUS ADVERSE DRUG REACTIONS IN CHILDREN: INSIGHTS FROM A TERTIARY CARE STUDY

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ABSTRACT

Background: Severe Cutaneous Adverse drug Reactions (SCARs) are rare but life-threatening conditions in children, characterized by extensive skin and mucosal involvement with systemic complications. Limited paediatric data, particularly from developing countries, necessitate further evaluation of their clinical and epidemiological patterns.

Materials and Methods: This retrospective cohort study included 53 paediatric patients (0–18 years) diagnosed with SCARs over a five-year period at a tertiary care centre. Data on demographics, clinical features, causative drugs, laboratory findings, treatment modalities, and outcomes were analysed. Statistical comparisons were performed to identify predictors of mortality.

Results: The mean age was 9.8 ± 4.6 years with male predominance (56.6%). Stevens–Johnson syndrome was the most common subtype (37.7%). Antiepileptics (41.5%) and antibiotics (34.0%) were the leading causative agents. Mucosal involvement was present in 86.8%, and systemic involvement was frequent, particularly hepatic (35.8%). Mortality was 11.3%, highest in toxic epidermal necrolysis (27.3%). Significant predictors of mortality included higher BSA involvement (p=0.003), ICU admission (p=0.001), TEN diagnosis (p=0.024), and hepatic involvement (p=0.011). No significant difference in outcomes was observed across treatment modalities.

Conclusion: Paediatric SCARs carry significant morbidity and mortality, with outcomes largely determined by disease severity rather than specific therapies. Early drug withdrawal and supportive care remain the cornerstone of management.

Keywords: Stevens–Johnson Syndrome, Toxic Epidermal Necrolysis (TEN), DRESS syndrome, paediatric, drug hypersensitivity.

INTRODUCTION

Severe Cutaneous Adverse drug Reactions (SCARs) represent a spectrum of rare but potentially life-threatening hypersensitivity reactions characterized by extensive skin and mucosal involvement along with systemic manifestations.[1] The major clinical entities within SCARs include Stevens–Johnson Syndrome (SJS), Toxic Epidermal Necrolysis (TEN), SJS–TEN overlap, drug reaction with eosinophilia and systemic symptoms, and Acute Generalized Exanthematous Pustulosis (AGEP).[1] These conditions are primarily immune-mediated and often triggered by medications, leading to keratinocyte apoptosis, widespread epidermal detachment, and multiorgan involvement.[1,2]

Although SCARs are uncommon in the general population, their clinical significance lies in their high morbidity and mortality. The overall incidence of SJS and TEN has been estimated at approximately 1–6 cases per million person-years, with TEN carrying a mortality rate as high as 25–

35%.[3,4] DRESS syndrome has an estimated incidence of 1 in 1,000 to 1 in 10,000 drug exposures, with mortality rates ranging from 5% to 10% due to visceral organ involvement.[5] In paediatric populations, SCARs are relatively rarer compared to adults; however, they present unique diagnostic and therapeutic challenges due to age-related pharmacokinetics, differing drug exposure patterns, and variable clinical presentations.[6]

Drugs most frequently implicated in SCARs include antiepileptics (such as carbamazepine, phenytoin, and lamotrigine), antibiotics (particularly sulfonamides and beta-lactams), and non-steroidal anti-inflammatory drugs.[7] The pathogenesis involves complex interactions between drug metabolites, genetic predisposition (notably specific HLA alleles), and immune activation, leading to cytotoxic T-cell–mediated keratinocyte injury.[8] Viral reactivation, especially with human herpesvirus-6, has also been implicated in the pathogenesis of DRESS syndrome.[9]

The paediatric age group (0–18 years) represents a vulnerable population in whom early recognition of SCARs is critical to prevent adverse outcomes. Clinical manifestations may range from prodromal fever and malaise to extensive mucocutaneous involvement, epidermal necrolysis, and systemic complications such as hepatitis, nephritis, and pneumonitis.[10] Delayed diagnosis or inappropriate management can significantly increase the risk of complications, prolonged hospitalization, and mortality.[10]

Management of SCARs remains largely supportive, including prompt withdrawal of the offending drug, intensive care support, fluid and electrolyte management, wound care, and prevention of secondary infections.[11] The role of immunomodulatory therapies such as systemic corticosteroids, intravenous immunoglobulin (IVIG), cyclosporine, and biologics remains controversial, with varying evidence regarding their efficacy, particularly in children.[11,12] Additionally, prognostic scoring systems such as SCORTEN have been validated primarily in adults and may have limited applicability in paediatric cohorts.[13]

Despite increasing awareness, there is a paucity of comprehensive data on the clinico-epidemiological profile and treatment outcomes of SCARs in the paediatric population, especially in developing countries.[14] Variations in drug prescription patterns, genetic susceptibility, healthcare access, and treatment protocols necessitate region-specific data to better understand disease burden and optimize management strategies.[14]

In this context, the present study aimed to evaluate the clinical spectrum, epidemiological characteristics, causative agents, and treatment outcomes of SCARs in children aged 0–18 years through a retrospective cohort design, thereby contributing to improved recognition, risk stratification, and evidence-based management of these severe adverse drug reactions.

MATERIALS AND METHODS

Study Design and Setting: This retrospective cohort study was conducted in the Department of Dermatology in collaboration with the Departments of Paediatrics and Pharmacology at a tertiary care teaching hospital. The study included all eligible paediatric patients admitted over a defined study period of five years (January 2019 to December 2024). Being a tertiary referral centre, the hospital caters to a large and diverse population, ensuring inclusion of moderate to severe cases of adverse drug reactions requiring hospitalization.

Study population: The study population comprised children aged 0 to 18 years diagnosed with Severe Cutaneous Adverse drug Reactions (SCARs), including Stevens–Johnson syndrome, toxic epidermal necrolysis, SJS–TEN overlap, drug reaction with eosinophilia and systemic symptoms, and acute generalized exanthematous pustulosis (AGEP). Diagnosis was based on standard clinical criteria supported by dermatological assessment and, where available, histopathological findings. All consecutive cases fulfilling inclusion criteria during the study period were included to minimize selection bias.

Inclusion and exclusion criteria

Children aged ≤18 years with a confirmed diagnosis of SCARs and complete medical records were included in the study. Patients with mild cutaneous adverse drug reactions (such as maculopapular rash or urticaria), incomplete case records, uncertain diagnosis, or those with alternative dermatological conditions mimicking SCARs (e.g., viral exanthems, autoimmune blistering disorders) were excluded to maintain diagnostic accuracy.

Data collection

Data were retrieved from hospital medical records, case sheets, discharge summaries, and pharmacovigilance reports using a structured data collection proforma. Extracted variables included demographic details (age, sex), clinical characteristics (type of SCAR, presenting symptoms, body surface area involvement, mucosal involvement, systemic manifestations), drug-related information (suspected offending drug, indication, latency period between drug exposure and onset), laboratory parameters (complete blood counts, liver and renal function tests, inflammatory markers), and severity assessment (including SCORTEN where applicable). Information regarding management strategies, including withdrawal of the offending drug, supportive care, use of systemic corticosteroids, intravenous immunoglobulin (IVIG), cyclosporine, or other immunomodulatory therapies, was also recorded.

Outcome measures

Primary outcome measures included clinical outcome at discharge categorized as recovery, recovery with complications, or mortality. Secondary outcomes included duration of hospital

stay, need for intensive care unit (ICU) admission, occurrence of complications (such as sepsis, organ dysfunction, or ocular sequelae), and time to re-epithelialization. Treatment response was assessed based on clinical improvement, stabilization of skin lesions, and resolution of systemic manifestations.

Causality assessment

Causality between suspected drugs and adverse reactions was assessed using WHO–UMC causality assessment scale. Cases were categorized as certain, probable, possible, or unlikely based on temporal association, dechallenge/rechallenge information, and exclusion of alternative causes.

Statistical analysis

Data were entered into Microsoft Excel and analyzed using Statistical Package for the Social Sciences (SPSS) software (version XX). Descriptive statistics were used to summarize demographic and clinical variables, expressed as mean ± standard deviation (SD) for continuous variables and frequencies with percentages for categorical variables. Comparative analyses between different SCAR subgroups and outcomes were performed using appropriate statistical tests such as the chi-square test or Fisher's exact test for categorical variables and independent t-test or Mann–Whitney U test for continuous variables, depending on data distribution. A p-value of <0.05 was considered statistically significant.

Ethical considerations

The study adhered to the principles of the Declaration of Helsinki. As a retrospective study utilizing existing medical records, the requirement for informed consent was waived by the Institutional Ethics Committee. All patient identifiers were removed to ensure confidentiality and data privacy throughout the study.

RESULTS

The mean age of the study population was 9.8 ± 4.6 years, with the majority belonging to the 6–12 years age group (39.6%), followed by adolescents aged 13–18 years (37.7%). There was a male predominance (56.6%). Among SCAR subtypes, SJS was the most common (37.7%), followed by DRESS (22.6%), TEN (20.8%), and SJS–TEN overlap (13.2%), while AGEP constituted a minority (5.7%). Mucosal involvement was observed in 86.8% of cases, most frequently affecting the oral cavity (77.4%), followed by ocular (52.8%) and genital mucosa (35.8%). Severe cutaneous involvement with >30% BSA detachment was noted in 24.5% of patients, with a mean BSA involvement of 28.4 ± 18.6%. [Table 1]

Table 1: Baseline Demographic and Clinical Characteristics of Paediatric SCAR Patients (n = 53)

Variable	Frequency (%)/mean ± SD
Age (years)	9.8 ± 4.6
Age group	
0–5 years	12 (22.6%)
6–12 years	21 (39.6%)
13–18 years	20 (37.7%)
Gender	
Male	30 (56.6%)
Female	23 (43.4%)
Type of SCAR	
Stevens–Johnson syndrome	20 (37.7%)
Toxic Epidermal Necrolysis (TEN)	11 (20.8%)
SJS–TEN overlap	7 (13.2%)
drug reaction with eosinophilia and systemic symptoms	12 (22.6%)
AGEP	3 (5.7%)
Cutaneous and mucosal findings	
Mucosal involvement	46 (86.8%)
Oral mucosa	41 (77.4%)
Ocular involvement	28 (52.8%)
Genital mucosa	19 (35.8%)
Skin detachment >30% BSA	13 (24.5%)
Mean BSA involvement (%)	28.4 ± 18.6

SCAR – Severe Cutaneous Adverse drug Reactions; SJS – Stevens–Johnson Syndrome; TEN – Toxic Epidermal Necrolysis; DRESS – Drug Reaction with Eosinophilia and Systemic Symptoms; AGEP – Acute Generalized Exanthematous Pustulosis; BSA – Body Surface Area.

Antiepileptic drugs were the most frequently implicated class, accounting for 41.5% of cases, with phenytoin (20.8%) and carbamazepine (13.2%) being the leading agents. Antibiotics contributed to 34.0% of SCARs, predominantly cotrimoxazole (15.1%) and amoxicillin-clavulanate (9.4%). NSAIDs were responsible for 13.2% of cases, most commonly ibuprofen (7.5%). Antitubercular drugs constituted 7.5%, while a small proportion (3.8%) was attributed to other agents such as allopurinol and nevirapine [Table 2].

Table 2: Suspected Causative Drugs in Paediatric SCAR Patients (n = 53)

Drug Category	Specific Drug	Frequency (%)
Antiepileptics (n = 22, 41.5%)	Phenytoin	11 (20.8%)
	Carbamazepine	7 (13.2%)
	Lamotrigine	3 (5.7%)
	Phenobarbital	1 (1.9%)
Antibiotics (n = 18, 34.0%)	Cotrimoxazole	8 (15.1%)
	Amoxicillin-clavulanate	5 (9.4%)
	Ceftriaxone	3 (5.7%)
	Azithromycin	2 (3.8%)
NSAIDs (n = 7, 13.2%)	Ibuprofen	4 (7.5%)
	Paracetamol	2 (3.8%)
	Diclofenac	1 (1.9%)
Antitubercular drugs (n = 4, 7.5%)	Isoniazid	2 (3.8%)
	Rifampicin	1 (1.9%)
	Pyrazinamide	1 (1.9%)
Others (n = 2, 3.8%)	Allopurinol	1 (1.9%)
	Nevirapine	1 (1.9%)

NSAIDs – Non-Steroidal Anti-Inflammatory Drugs.

Systemic involvement was common, with hepatic involvement observed in 35.8%, followed by renal (17.0%), gastrointestinal (15.1%), and pulmonary involvement (11.3%). Haematological abnormalities included leucocytosis (39.6%), anaemia (34.0%), eosinophilia (26.4%), and thrombocytopenia (13.2%). Fever was the most frequent presenting symptom (77.4%), while lymphadenopathy (30.2%) and facial oedema (18.9%) were notable, particularly in DRESS cases. Severe disease markers included ICU admission in 28.3% and mechanical ventilation in 9.4% of patients. The mean latency period between drug exposure and symptom onset was 12.6 ± 6.3 days [Table 3].

Table 3: Clinical Features and Laboratory Abnormalities in Paediatric SCAR Patients (n = 53)

Parameter	Frequency (%) / Mean ± SD
Systemic involvement	
Hepatic involvement	19 (35.8%)
Renal involvement	9 (17.0%)
Pulmonary involvement	6 (11.3%)
Gastrointestinal involvement	8 (15.1%)
Haematological abnormalities	
Eosinophilia (>500 cells/µL)	14 (26.4%)
Leucocytosis (>11,000/mm³)	21 (39.6%)
Anaemia	18 (34.0%)
Thrombocytopenia	7 (13.2%)
General clinical features	
Fever	41 (77.4%)
Lymphadenopathy	16 (30.2%)
Facial oedema (notably in DRESS)	10 (18.9%)
Severity indicators	
ICU admission required	15 (28.3%)
Mechanical ventilation	5 (9.4%)
Mean latency period (days)	12.6 ± 6.3

DRESS – Drug Reaction with Eosinophilia and Systemic Symptoms; ICU – Intensive Care Unit.

Systemic corticosteroids were the most commonly administered therapy (58.5%), followed by supportive care alone (20.8%), IVIG (13.2%), and cyclosporine (7.5%). All patients received fluid and electrolyte management, while wound care was provided in 90.6%. Nearly one-third (32.1%) required antibiotics for secondary infections, and 39.6% received nutritional support. Ophthalmological intervention was necessary in 49.1% of cases. ICU care was required in 28.3%, with mechanical ventilation in 9.4% and blood transfusion in 11.3%. Early withdrawal of the offending drug within 48 hours was achieved in 73.6% of patients, and clinical stabilization within 5 days occurred in 64.2%. Overall, complete recovery was observed in 71.7%, while 17.0% had complications and mortality was 11.3%. The mean hospital stay was 11.9 ± 5.4 days. [Table 4]

Table 4: Treatment Modalities, Supportive Care, and Outcomes (n = 53)

Parameter	Frequency (%)/mean ± SD
Treatment	
Primary treatment approach	
Supportive care only	11 (20.8%)
Systemic corticosteroids	31 (58.5%)

Intravenous immunoglobulin (IVIG)	7 (13.2%)
Cyclosporine	4 (7.5%)
Supportive care components	
Fluid and electrolyte management	53 (100%)
Wound care (dressings, barrier care)	48 (90.6%)
Antibiotic therapy (for secondary infection)	17 (32.1%)
Nutritional support (enteral/parenteral)	21 (39.6%)
Ophthalmology referral/intervention	26 (49.1%)
Advanced care measures	
ICU admission	15 (28.3%)
Mechanical ventilation	5 (9.4%)
Blood product transfusion	6 (11.3%)
Treatment timing and response	
Early drug withdrawal (<48 hours)	39 (73.6%)
Delayed drug withdrawal (>48 hours)	14 (26.4%)
Clinical stabilization within 5 days	34 (64.2%)
Outcome	
Complete recovery	38 (71.7%)
Recovery with complications	9 (17.0%)
Mortality	6 (11.3%)
Mean hospital stay (days)	11.9 ± 5.4

IVIG – Intravenous Immunoglobulin; ICU – Intensive Care Unit.

A statistically significant difference in outcomes was observed across SCAR subtypes (p = 0.021). Patients with SJS and DRESS demonstrated favourable outcomes, with recovery rates of 85.0% and 83.3%, respectively, and minimal or no mortality. In contrast, TEN was associated with the poorest prognosis, showing a mortality rate of 27.3% and higher complication rates. SJS–TEN overlap cases showed intermediate outcomes, while AGEP exhibited variable outcomes due to small sample size. These findings highlight the prognostic heterogeneity among SCAR subtypes. [Table 5]

Table 5: Outcome Distribution Across SCAR Subtypes (n = 53)

SCAR Type	Recovery (n=38)	Complications (n=9)	Mortality (n=6)	p-value
	Frequency (%)			
SJS (n=20)	17 (85.0%)	2 (10.0%)	1 (5.0%)	0.021
TEN (n=11)	5 (45.5%)	3 (27.3%)	3 (27.3%)	
Overlap (n=7)	4 (57.1%)	2 (28.6%)	1 (14.3%)	
DRESS (n=12)	10 (83.3%)	2 (16.7%)	0 (0%)	
AGEP (n=3)	2 (66.7%)	0 (0.0%)	1 (33.3%)	

SJS – Stevens–Johnson Syndrome; TEN – Toxic Epidermal Necrolysis; DRESS – Drug Reaction with Eosinophilia and Systemic Symptoms, AGEP – Acute Generalized Exanthematous Pustulosis.

Mortality was significantly associated with higher disease severity indicators. Patients who died had significantly greater BSA involvement (48.6 ± 20.4% vs 25.9 ± 15.8%, p = 0.003), higher ICU admission rates (83.3% vs 21.3%, p = 0.001), increased prevalence of TEN (50.0% vs 17.0%, p = 0.024), and more frequent hepatic involvement (83.3% vs 29.8%, p = 0.011). Age was not significantly associated with mortality (p = 0.118). Although mortality appeared higher in patients receiving IVIG, no statistically significant difference was observed between treatment modalities (p = 0.326), suggesting that outcomes were more strongly influenced by disease severity than by specific therapeutic interventions. [Table 6]

Table 6: Predictors of Mortality and Treatment Outcome in Paediatric SCAR Patients (n = 53)

Variable	Recovery (n=47)	Mortality (n=6)	p-value
	Frequency (%) / Mean ± SD		
Age (years)	9.5 ± 4.5	12.2 ± 4.9	0.118
BSA (%)	25.9 ± 15.8	48.6 ± 20.4	0.003
ICU admission (%)	10 (21.3%)	5 (83.3%)	0.001
TEN diagnosis (%)	8 (17.0%)	3 (50.0%)	0.024
Hepatic involvement (%)	14 (29.8%)	5 (83.3%)	0.011
Treatment			
Steroids (n=31)	24 (77.4%)	3 (9.7%)	0.326
IVIG (n=7)	4 (57.1%)	2 (28.6%)	
Cyclosporine (n=4)	3 (75.0%)	0 (0.0%)	
Supportive only (n=11)	7 (63.6%)	1 (9.1%)	

BSA – Body Surface Area; ICU – Intensive Care Unit; TEN – Toxic Epidermal Necrolysis; IVIG – Intravenous Immunoglobulin.

DISCUSSION

The present study provides a comprehensive evaluation of the clinico-epidemiological profile and outcomes of paediatric SCARs, highlighting several important observations that are largely consistent with existing literature while also offering region-specific insights.[15,16] The mean age of 9.8 ± 4.6 years with a predominance in the 6–12 year age group aligns with prior paediatric cohort studies by Divyalasya et al., and Varghese et al., which have reported higher incidence in school-aged children, particularly between 11–15 years.[15,16]

The observed male predominance (56.6%) is comparable to several Indian and international studies by Divyalasya et al., Varghese et al., and Dibek Misirlioglu et al., although gender distribution in SCARs remains variably reported.[15,16,17]

In terms of disease spectrum, Stevens–Johnson syndrome emerged as the most common subtype (37.7%), followed by drug reaction with eosinophilia and systemic symptoms (22.6%) and toxic epidermal necrolysis (20.8%). This distribution is consistent with multicentric studies by Xiao et al., and Oh et al., demonstrating that SJS/TEN spectrum disorders constitute the majority of SCARs, followed by DRESS and AGEP.[18,19]

The high frequency of mucosal involvement (86.8%) and significant ocular involvement (52.8%) in our cohort reflects the characteristic epithelial tropism of SCARs, driven by cytotoxic T-cell–mediated keratinocyte apoptosis and widespread epithelial necrolysis.[20] The mean BSA involvement of 28.4% and presence of >30% detachment in nearly one-fourth of cases indicate a substantial burden of severe disease, comparable to previously reported paediatric series.

Drug causality patterns in our study strongly reinforce existing pharmacovigilance data. Antiepileptics (41.5%) and antibiotics (34.0%) were the leading triggers, with phenytoin, carbamazepine, and cotrimoxazole being the most implicated agents. Similar findings have been consistently reported by Dégboé et al., and Lee et al., where anticonvulsants and sulfonamide antibiotics account for the majority of SCAR cases.[21,22] The presence of NSAIDs and antitubercular drugs as contributors reflects prescribing trends in developing countries, including India, where infectious diseases and epilepsy are common indications.[23] The pathophysiological basis of these reactions involves drug-specific immune activation, often associated with genetic susceptibility (e.g., HLA alleles), leading to massive keratinocyte apoptosis via granulysin and Fas-mediated pathways.[24]

Systemic involvement was frequent in our cohort, particularly hepatic dysfunction (35.8%), which is in agreement with the known predilection of DRESS syndrome for multiorgan involvement.[23] Haematological abnormalities such as eosinophilia (26.4%) and leucocytosis (39.6%) further support immune activation and systemic inflammation. The requirement of ICU care in 28.3% and mechanical ventilation in 9.4% reflects the severity of illness, comparable to earlier reports by Mathur et al., and Rajalakshmi et al., where a significant proportion of paediatric SCAR patients required intensive monitoring. [23,25]

The mean latency period of 12.6 days is also consistent with the typical delayed hypersensitivity reaction timeline described in study by Javdan et al.[26]

Management strategies in this study predominantly involved systemic corticosteroids (58.5%), followed by supportive care, IVIG, and cyclosporine. The widespread use of corticosteroids reflects common clinical practice in India despite ongoing controversy.[23]

Previous studies by Mathur et al., Lee et al., and Javdan et al., have reported conflicting evidence regarding the efficacy of corticosteroids and IVIG, with no definitive mortality benefit established.[22,23,26]

Our findings similarly demonstrated no statistically significant difference in outcomes across treatment modalities ($p = 0.326$), suggesting that treatment response may be more closely related to disease severity rather than specific immunomodulatory therapy. Importantly, early drug withdrawal (<48 hours) in 73.6% of cases and rapid clinical stabilization in 64.2% highlight the critical role of prompt identification and cessation of the offending agent in improving outcomes.[27]

The overall mortality rate of 11.3% observed in this study is slightly higher than some paediatric reports by Kloypan et al., and Rajalakshmi et al., but remains within the expected range, given the inclusion of severe cases such as TEN.[24,25] Previous literature by Javdan et al., and Rieder et al., indicates that paediatric mortality is generally lower than in adults but remains significantly elevated in TEN, where mortality can reach up to 25–35%.[26,27]

In our cohort, TEN demonstrated the highest mortality (27.3%), consistent with its known severity and extensive epidermal loss leading to complications such as sepsis and multiorgan failure.[27]

In contrast, SJS and DRESS showed favourable outcomes, supporting prior observations that children generally have better prognosis compared to adults in studies by Abrol et al., and Noguera-Morel et al.[28,29]

Importantly, this study identified key predictors of mortality, including higher BSA involvement ($p = 0.003$), ICU admission ($p = 0.001$), presence of TEN ($p = 0.024$), and hepatic involvement ($p = 0.011$). These findings are biologically plausible, as extensive epidermal detachment increases the risk of fluid loss, infection, and systemic complications, while organ involvement reflects severe systemic immune activation. [30,31,32]

The lack of significant association with age further suggests that disease severity rather than demographic factors determines outcomes in paediatric SCARs. [33,34]

Limitations

This study has certain limitations. Its retrospective design may be subject to incomplete documentation and information bias. The relatively small sample size (n=53) limits generalizability and subgroup analysis. Being a single-centre study, findings may not reflect broader population variability. Additionally, lack of uniform treatment protocols and absence of long-term follow-up precluded assessment of late sequelae and definitive evaluation of therapeutic efficacy.

CONCLUSION

This study highlights that paediatric severe cutaneous adverse drug reactions are associated with substantial morbidity and notable mortality, particularly in severe forms such as toxic epidermal necrolysis. Antiepileptics and antibiotics were the most common causative agents, reflecting prevailing prescribing patterns. Early drug withdrawal and prompt supportive care were critical determinants of favourable outcomes. Disease severity indicators, including extensive body surface area involvement, ICU requirement, and hepatic dysfunction, were significant predictors of mortality. Although various immunomodulatory therapies were employed, no significant difference in outcomes was observed. These findings emphasize the need for early recognition, risk stratification, and standardized management protocols to improve outcomes in paediatric SCARs.

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