

FROM RELIEF TO RISK : Stevens-Johnson Syndrome due to Diclofenac, a common pain relieving drug



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INTRODUCTION

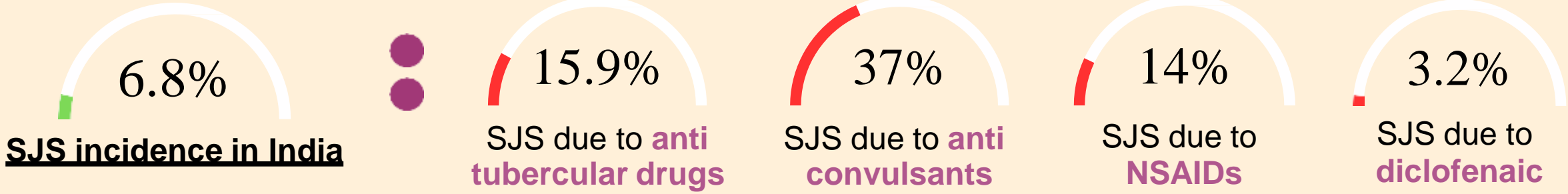
Stevens-Johnson Syndrome (SJS) is one of the rarest conditions, most often occurring as an adverse drug reaction (ADR), with food additives, fumigants, and acute graft-versus-host reactions being exceptionally rare causes. Medications commonly implicated in SJS include anti-tubercular, anticonvulsant, and antiretroviral drugs. Reports of SJS following the use of nonsteroidal anti-inflammatory drugs (NSAIDs) such as diclofenac are exceedingly uncommon. The condition is characterized by rashes, blisters, and skin peeling, particularly affecting the mucous membranes of the eyes, mouth, and genitalia. SJS and Toxic Epidermal Necrolysis (TEN) are closely related conditions, distinguished primarily by the extent of body surface involvement. SJS is diagnosed when less than 10% of the body is affected, while TEN involves more than 30%. When 10% to 30% of the body surface is affected, the condition is classified as ‘SJS-TEN overlap’.

CASE REPORT

- A seventeen year old girl received treatment for her back pain, which was sudden in onset and severe in nature, at a local hospital for which she received inj. Diclofenac 2cc, intramuscularly.
- Within a few hours, she developed lesions on her chest, progressing to her abdomen, genitals, face, oral cavity and peripheral extremities in the mentioned sequential order.
- There were multiple, discrete, flaccid vesicles and bullae discretely spread all over her chest, abdomen, genitals, face, oral cavity and and peripheral extremities. Few of the vesicles and bullae were deroofed.

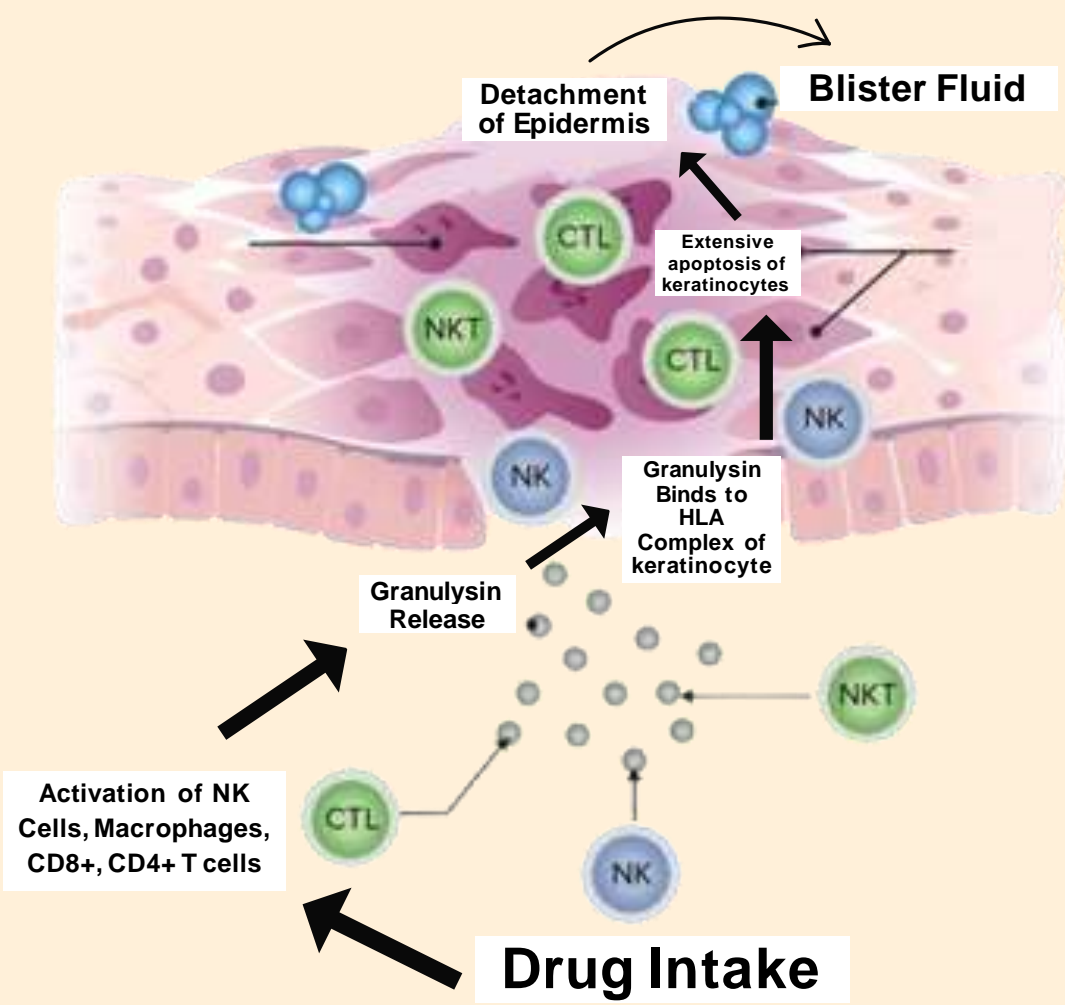
INVESTIGATIONS

- **Pseudo-Nikolsky sign:** Positive, the dermis and epidermis are visibly separated when lateral pressure is applied.
- **Complete blood count:** TLC and AEC raised
- **Urine routine:** Blood in Urine
- **Tzank smear:** Leukocytes, Necrotic Keratinocytes, and Fibroblasts
- **No acantholytic cells found.**



DISCUSSION

- Cutaneous adverse drug reaction (CADR) linked to Diclofenac Sodium, a commonly prescribed NSAID.
- Diclofenac, a COX-2 inhibitor, widely used in surgeries, dental procedures, and back pain treatment.
- Common side effects: hepatic, cardiovascular, gastrointestinal, and renal systems involvement.
- Rare but severe association with Stevens-Johnson Syndrome (SJS), carrying a high mortality risk.
- SJS more severe in febrile patients, particularly children and adolescents, affecting mucosal sites.
- Toxic Epidermal Necrolysis (TEN) primarily in elderly, with over 95% of cases drug-induced.
- Preventative strategies: test dose administration, thorough patient history for risk factors (e.g., SLE).



MANAGEMENT

- Fluid resuscitation done by IV Ringer Lactate using Parkland Formula.
- Inj. DEXONA 2cc is administered to reduce inflammation
- Capsule DOXYCYCLINE 100mg is administered to reduce secondary bacterial infection
- Drain the bullae in sterile environment SOS.

ADVICE

- The patient is recommended to consume excess protein diet.
- FUDIC cream needs to be applied topically over the lesions.
- BACTIGRASS dressing is recommended.

CONCLUSION

- Raising awareness among prescribers about monitoring for drug eruptions, identifying high-risk medications, and conducting basic tests such as blood counts and renal and liver function tests, along with the prompt discontinuation of the offending drug, would be the most cost-effective approach.
- Moreover, both medical practitioners and patients should be informed of the warning signs of Stevens-Johnson Syndrome (SJS) and Toxic Epidermal Necrolysis (TEN) when using high-risk drugs.
- This awareness will foster a stronger doctor-patient relationship in clinical decision-making and help reduce the psychological impact on survivors.
- This case underscores the importance of administering a 0.1 ml intradermal test dose before giving the full parenteral dose of any drug, a practice that should be integrated into routine medical care.