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Episodic Conjunctival Inflammation after Stevens-Johnson Syndrome

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Stevens–Johnson syndrome (SJS) is a rare, acute desquamative disorder that affects the skin and mucous membranes. Its incidence is estimated at approximately six cases per million people per year. It is most commonly drug-induced and presents with a clinical picture resembling skin burn. It seems that intermediate drug metabolites can initiate an immune response in susceptible individuals. Ocular involvement can be severe, often resulting in permanent, significant dry eye disease and debilitating photophobia in survivors. In large retrospective studies, ocular involvement has been reported in 69% and 81% of patients. Loss of corneal limbal stem cells is perhaps the most serious consequence of these pathologies and can result in corneal epithelial vascularization and thickening.

We studied the histopathological, ultrastructural, and immunopathologic characteristics of conjunctiva from patients with SJS who developed recurrent conjunctival inflammation unassociated with external factors such as lid margin keratinization, sicca syndrome, trichiasis, or entropion was identified. The ultrastructural and immunopathologic characteristics of the conjunctiva from these patients were compared with patients with SJS without recurrent conjunctivitis. Our study demonstrated a distinctly different histopathologic, ultrastructural, and immunopathologic characteristics in this subset of patients.

Our findings suggested active and ongoing immune-mediated inflammation in the conjunctival biopsy samples of these patients. These findings included vasculitis or perivasculitis, immune complex deposition in vessel walls, vascular basement membrane disruption with thickening, and a predominance of helper T lymphocytes, macrophages, and Langerhans cells.

It is important to note that this rare clinical syndrome may represent the ocular counterpart of recurrent dermal or oral mucosal erythema multiforme.

For a better understanding of the pathogenesis and management of the ocular manifestations of SJS, please refer to the references below.

References

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