

Acute Skin Failure

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Abstract:

Acute Skin Failure (ASF) is a recent concept in which there is interference with skin function as a result of damage or loss of large area of skin resulting in loss of barrier function, haemodynamic problems, impaired thermal regulation, alternations in immunological functions, metabolic, endocrine and haemodynamic changes.⁽¹⁾

Introduction

There is a general misconception that dermatology is a mundane branch of medicine lacking its fair share of emergencies. On the contrary it is an important specialty with many life-threatening dermatosis unfamiliar to most physicians.

Several widespread dermatosis by virtue of their severity and extent causes "acute skin failure" (ASF) like in any other organ failure requiring admission to an intensive care unit.



Fig. 1 TEN - Showing desquamation in sheets, leaving raw red surface.

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Discussion

Skin failure can be caused by exfoliative dermatitis (ED), pustular psoriasis, toxic epidermal necrolysis (TEN) – Fig. 1 & 2, Staphylococcal scalded skin syndrome (SSSS), Steven-Johnson Syndrome, severe immunobullous and congenital bullous disorders, acute graft-versus-host disease, necrotizing fasciitis and Toxic Shock syndrome.⁽²⁾

Acute urticaria and angioneurotic edema and Acne fulminans are other dermatological emergencies requiring immediate treatment.

Specific therapy for exfoliative dermatitis depends upon the cause. Hospitalization may be required. For ED due to atopic dermatitis, stasis dermatitis, pemphigus foliaceus, lichen planus and Seborrheic dermatitis systemic Corticosteroids are the mainstay of management. ED in psoriasis or pityriasis rubra pilaris can be treated etretinate. Cytotoxic drugs are useful in patients with ED due to lymphoma, leukaemia and viral cancer. Patients with Steven-Johnson Syndrome and TEN may need care similar to that required for a major burn. SSSS is distinct from TEN. Prompt treatment with antibiot-

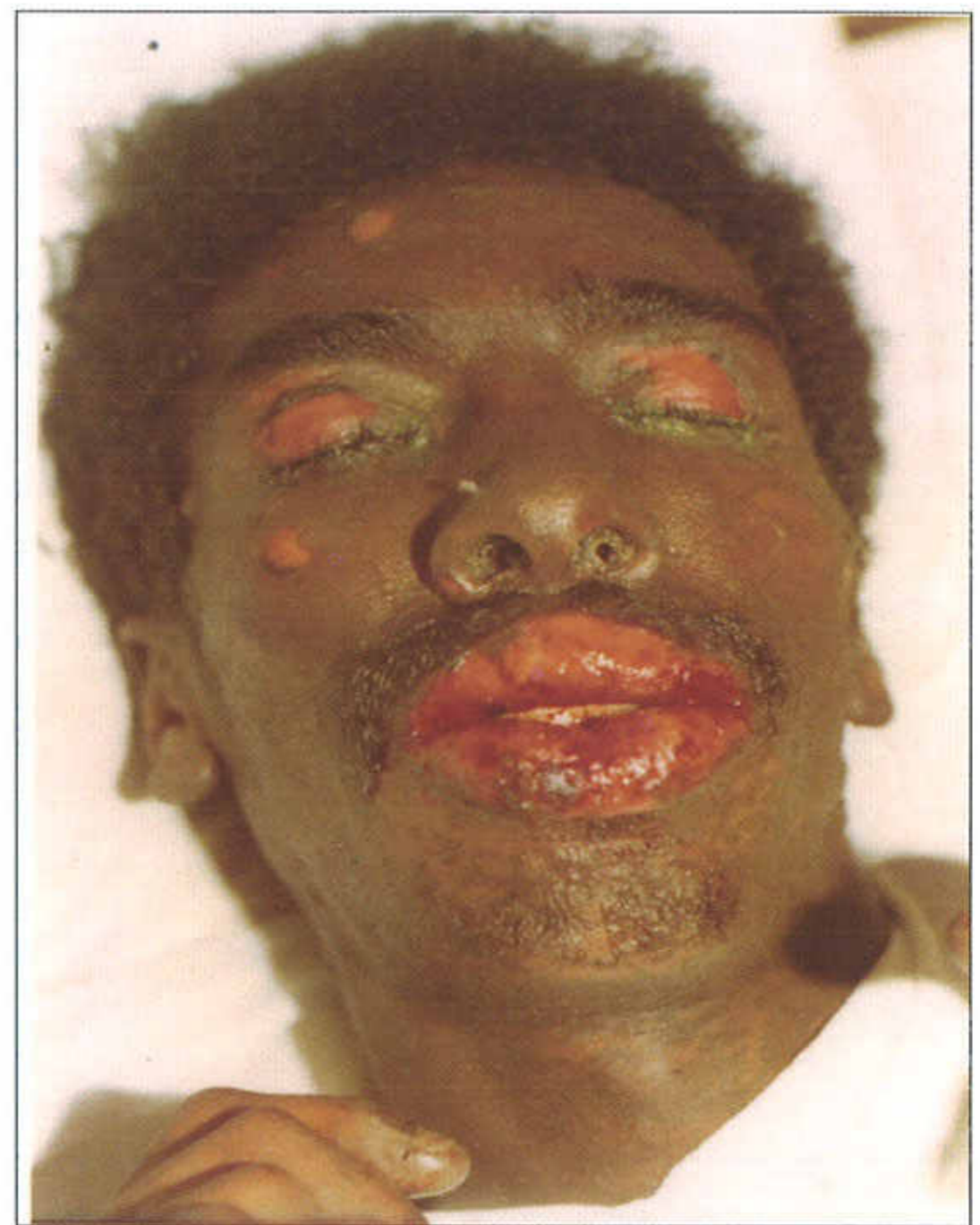


Fig. 2 TEN - is peak stage. Faint blotchy eruption of the face, sliding off of epidermis of the eyelids, forehead and right cheek, severe erosion of lip mucosa.

ics halts the progress of the disease. Methotrixate is the drug of first choice in severe psoriasis. Most bullous disorders - particularly bullous pemphigoid, herpes gestationis and blistering disease of childhood must be differentiated from the pemphigus group. Pemphigus is a serious disease that requires treatment with potent medications over long periods of time. Corticosteroids are the mainstay of treatment. With a combination of corticosteroids and azathioprine, the mortality rate has been lowered to about 5%. Loss or inflammation of a large proportion of the skin can rapidly result in impaired temperature and fluid regulation, often complicated by sepsis, leading to multisystem failure. Such patients should be transferred to an intensive care unit for management.

Therapy for toxic shock syndrome includes aggressive fluid replacement and betalactamase resistant antistaphylococcal antibiotics. In case of necrotizing vasculitis, early extensive debridement of involved tissue is essential, since antibiotic therapy alone has little effect.

Treatment of urticaria and angioneurotic edema includes histamine receptor blockers, prednisolone and epinephrine. Acne fulminans is a severe "dermatological emergency". This catastrophic disease should be treated with systemic corticosteroids and isotretinoin.⁽³⁾

Prompt recognition and appropriate treatment of life-threatening dermatosis are mandatory to avert acute skin failure.

Reference

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