

Journal of Pediatric Sciences

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Journal of Pediatric Sciences 2013;5:e198

How to cite this article:

**Hassan I, Anwar P. Pediatric Dermatological Emergencies: An Overview.
Journal of Pediatric Sciences. 2013;5:e198**

Pediatric Dermatological Emergencies: An Overview

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Abstract:

Dermatological emergencies including those in pediatric age group comprise of dermatoses where there is severe alterations in structure and function of the skin. Some of these may result in acute skin failure that needs early recognition, and often hospitalization, with careful monitoring and at times management in intensive care unit on the pattern of 100% burns in order to minimize the associated morbidity and mortality. Multi-disciplinary approach with synchronized team of dermatologist, pediatrician, critical care physician and skilled nursing staff is advisable. In this review article, we describe various pediatric dermatological emergencies commonly encountered in clinical practice and observed in various studies.

Keywords: Dermatological emergencies; pediatric dermatological emergencies; acute skin failure; intensive care unit

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Introduction

An emergency in the field of medical sciences is defined as any urgent condition perceived by the patient, which requires immediate medical or surgical evaluation or treatment, or an unexpected serious occurrence that may cause a great number of injuries and requires immediate attention.

As a result of many dermatoses, especially generalized, sudden severe alterations in the anatomy and physiology of skin may result. This leads to skin failure with multitude of associated complications, and such dermatoses are labeled as dermatological emergencies. Some of the conditions are common to adults and children, and some specific for a particular age group. Dermatological emergencies in children are not

uncommon. Worldwide, limited studies have been done to study the spectrum of such emergencies.

Dermatological concerns constitute about 30% of all outpatient visits to a pediatrician and 30% of all cases visiting dermatologists are of pediatric age group [1].

About 4% of all pediatric emergency cases have been estimated to be represented by dermatological disorders [2], with only 30% of these being true emergencies [3].

Pediatric emergency situation may be assessed on the basis of Nelson's severity index scoring system, which is based on respiratory effort, color, activity, temperature and play [4].

Many factors affect the mortality and morbidity associated with dermatological emergencies, including age of its presentation, severity of the condition and preparedness to deal with it. Prompt, vigorous and immediate management of most of these situations on the lines similar to that of burns by pharmacological therapy, and round the clock monitoring preferably in an intensive care unit setting results in significant decline in fatality rate associated with such dermatological emergencies. Detailed knowledge about the etio-pathogenesis of these conditions and their consequences is of prime importance for their effective management, as highlighted in this review article.

Age relation of pediatric dermatological emergencies

Dermatological emergencies in pediatric age group may present to the outpatient department of dermatology or pediatrics and/ or to the emergency department either in infancy (neonatal and post neonatal period) or childhood.

In a hospital-based Indian study, out of all dermatological emergencies, 15.5% were neonates, 9.7% infants, 36.9% preschool and 37.2% school going children [5]. The pattern of emergency dermatoses also varies in different age groups.

Neonates: In comparison with older children and adults, neonates (first 4 weeks of extra uterine life) are unique in several ways such as increased body surface to weight ratio, immature kidney functions and immunity, risk of intrauterine infection and trans-epidermal water loss [6]. This renders them highly susceptible to severe dehydration and either primary or secondary infections. A wide range of dermatoses such as infections, genodermatoses, metabolic disorders and vascular tumors are important causes of dermatological emergencies in this age group [5].

Post-neonatal age: In post neonatal period, in addition to these, emergency situation may also occur because of disabling severe atopic and infantile seborrhoeic dermatitis [5].

Preschool age and school going children: In preschool and school going children, various infections are very common dermatological emergencies because of more exposure to all sorts of infections from fellow students or playmates during sporting activities [7]. Drug reactions are also common in these age groups and usually due to anti-epileptics and antibiotics such as phenytoin, phenobarbitone, sulfonamides, ampicillin and anti-tubercular drugs, as these are the most commonly prescribed family of drugs in children [5,8].

In this article we describe the pediatric emergencies of various age groups together for the sake of convenience.

Causes of pediatric emergency dermatoses

Pediatric dermatological emergencies may be primary or secondary, and also congenital or acquired [6]. In primary dermatological emergency conditions, involvement of skin is the primary cause and/ or major manifestation, whereas secondary ones are usually associated with medical/ surgical emergencies, with cutaneous manifestations consequent upon underlying systemic involvement.

Important causes of dermatological emergencies in children are elucidated in table 1 and brief description of the major ones is given below.

i. Erythroderma (exfoliative dermatitis)

Erythroderma in pediatric age group is rare, but potentially life threatening condition irrespective of underlying etiology (figure 1). Defined as erythema and scaling involving $\geq 90\%$ of the body surface area, erythroderma may be primary (developing de novo) or secondary (progressing from pre-existing skin disease) and can be acute (few days duration) or chronic.

There are a number of causes for erythroderma in children, also called red scaly baby [6,9]. The type of dermatoses and their frequencies vary between different studies and also depends on the age. Among the most important causes are infections like staphylococcal scalded skin syndrome, scarlet fever, congenital cutaneous

Table 1. Common causes of pediatric dermatological emergencies

Erythroderma (exfoliative dermatitis) of various causes (see text)

Urticaria, Angioedema and Anaphylaxis

Bullous disorders

Infections

Staphylococcal scalded skin syndrome
 Cutaneous infection
 Necrotizing fasciitis
 Varicella
 Herpes Simplex Virus infection
 Candidiasis
 Others (see text)

Drug reactions

Connective tissue diseases

Metabolic conditions

Hereditary conditions

Collodion baby
 Harlequins fetus
 Epidermolysis bullosa

Vasculitis of various types

Dermatological reactions associated with NICU

Phototherapy induced erythema
 Chemical burns

Miscellaneous

Kasabach-Merritt phenomenon
 Purpura fulminans
 Kawasaki disease
 Sclerema neonatorum
 Erythromelalgia

Emergencies related to sexually transmitted diseases (STDs)

Emergencies related to leprosy

Emergencies related to dermato-surgery procedures

Anaphylaxis
 Vasovagal Syncope
 Lidocaine allergy
 Status Epilepticus



Figure 1. Clinical photograph of pediatric erythroderma

candidiasis [10]. Other important causes of pediatric erythroderma are ichthyosiform erythroderma, atopic dermatitis, infantile seborrheic dermatitis and un-identified causes. Some of the rare causes include congenital erythrodermic psoriasis, diffuse cutaneous mastocytosis, graft versus host disease, congenital erythrodermic pityriasis rubra pilaris, metabolic and nutritional disorders like multiple carboxylase, essential fatty acid and essential amino acid deficiency, and ectodermal dysplasias [10-14]. Drug induced erythrodermas in children occurs commonly due to sulfonamides, anti-malarials, penicillins, isoniazid, thioacetazone, streptomycin, non-

steroidal anti-inflammatory drugs (NSAIDs), topical tar, homeopathic and ayurvedic medicines, captopril, cimetidine and ampicillin [15-17]. In neonatal erythroderma, ceftriaxone and vancomycin have been incriminated [18, 19]. Immunodeficiency was the leading cause (30%) of erythroderma in neonates and infants in western studies [20], as also Omenn syndrome [21] (which is an autosomal recessive condition with erythroderma, failure to thrive, lymphadenopathy and recurrent infections), and graft versus host reaction [22,23]. Other causes are Netherton syndrome and Leiner`s disease [20].

Consequences of neonatal erythroderma

The active management of erythroderma should be aimed at prevention or treatment of consequences and/ or complications of erythroderma, as diagnosis of the underlying cause is usually delayed. The loss of cutaneous barrier and skin failure results in inter-related alterations in trans-epidermal water loss, caloric or heat loss and increased metabolic rate [24-26].

Complications of neonatal erythroderma

Children especially neonates with erythroderma are at increased risk of complications such as hypernatremic dehydration, severe systemic infections, hypo-albuminaemia and hyperpyrexia or hypothermia [20,27].

Regardless of underlying disease, the management of neonatal erythroderma includes fluid and electrolyte balance, correction of caloric and protein intake, and prevention and treatment of infections [20]. Specific therapy is started after establishing the diagnosis of the underlying cause.

ii. Urticaria, Angioedema

Urticaria and angioedema are common cutaneous reaction patterns. Urticaria is characterized by transient, pruritic, mildly erythematous papules or wheals because of dermal edema, lasting for less than 24 hours, except for urticarial vasculitis which lasts longer [28]. Angioedema involves deeper subcutaneous structures [28]. Acute episodes of urticaria

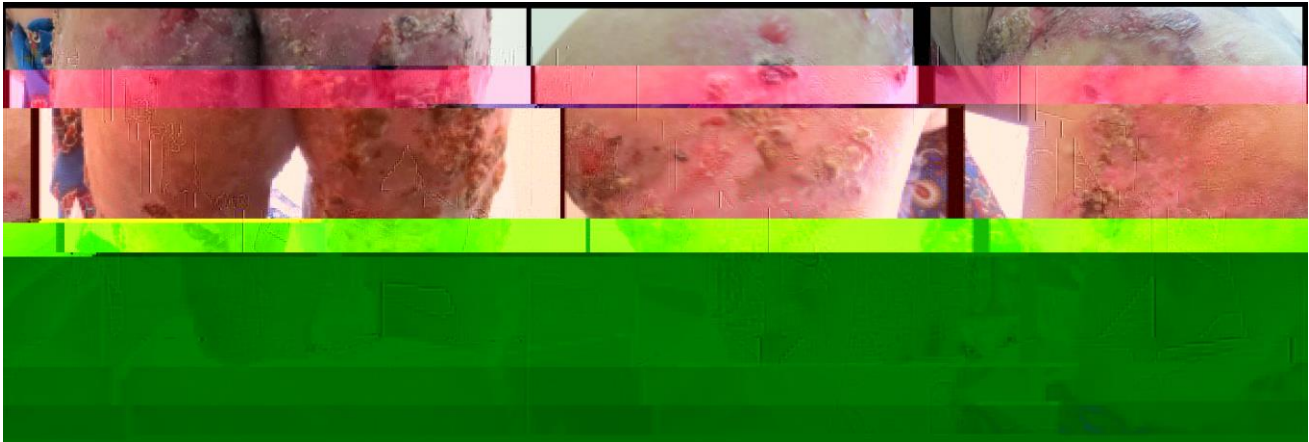


Figure 2. Clinical photograph of dystrophic epidermolysis bullosa

especially when associated with angioedema may be life threatening because of laryngeal edema and respiratory mucosal involvement. Severe attacks of urticaria in children may be associated with abdominal pain, nausea, vomiting due to intestinal obstruction.

iii. Bullous disorders:

Although immunobullous diseases like pemphigus, pemphigoid etc may present in pediatric age group with associated complications, yet the hereditary mechano-bullous disorders like epidermolysis bullosa (EB) are very common and can be primarily disabling, even life-threatening in some cases. Depending upon the level of cleavage and extent of body involvement, EB is divided into three types: EB simplex (EBS), junctional EB (JEB) and dystrophic EB (DEB) (figure 2). Among several subtypes of EB, severe form of EBS-Dowling Meara (EBS-DM), Herlitz-type JEB (JEB-H) and recessive DEB (RDEB) can be lethal especially in neonatal period [29].

iv. Infections

Various forms of primary cutaneous infections may be lethal as such, or may be an important cause of erythroderma, especially so in neonates and infants. Bacterial causes include more commonly encountered staphylococcal scalded skin syndrome (SSSS), along with others like, cellulitis, toxic shock syndrome, necrotizing fasciitis, multiple abscesses with sepsis,

extensive bullous impetigo, scarlet fever, ecthyma gangrenosum. Viral infections and exanthems especially associated with thrombocytopenia or shock, and fungal infections can also be detrimental [30]. Description of more important infections follows.

Staphylococcal scalded skin syndrome (Ritter's disease): This condition is one of the commonest causes of infections seen in infants and children, caused by *Staphylococcus aureus* phage type 71 due to liberation of exotoxin [31]. Clinically it presents as diffuse erythema, fever, tender skin, large flaccid bullae with clear fluid which rupture soon after being formed. This may lead to extensive loss of the skin surface. Haematogenous spread of the exfoliative toxins from a localized source causes widespread epidermal damage at distant sites [31].

Necrotizing fasciitis: Rare in pediatric age group, necrotizing fasciitis is characterized by fulminant course. The infection is poly-microbial in 75% of cases. In 25% of mono-microbial infection, *staphylococcus aureus* is the usual cause. Management includes immediate surgical intervention along with antibiotics [32]. Death usually occurs due to septicaemic shock, disseminated intravascular coagulation and/ or multiple organ failure [33].

Varicella: Varicella infection is transmitted from other infectious cases. Neonatal varicella is

usually transmitted from maternal varicella during last 3 weeks of pregnancy. The presentation of varicella during first 10-12 days of extra-uterine life suggests trans-placental transmission of the disease. Post natal acquired varicella presents after 12 days of life [34]. The mortality associated with varicella depends on the extent and severity of the infection, promptness of diagnosis and management, along with the day of onset of rash in the mother and child [35, 36]. Disseminated infection with pneumonia, hepatitis or meningo-encephalitis is associated with a higher mortality rate. Death from severe pneumonitis and respiratory distress may often occur 4-6 days after the onset of lesions [34].

Herpes simplex virus infection (HSV) infection: HSV infection if localized is not detrimental. But disseminated form of infection especially in neonates may be lethal. Neonatal HSV infection is transmitted from mother during intrauterine (5%), peri-partum (85%) and post partum (10%) periods [37]. Infants born to mothers who have first episode of genital herpes near term are at increased risk of developing neonatal herpes than those born to mothers with recurrent infection [38]. Occurrence of vesicles at or soon after birth is the most common clinical presentation of neonatal HSV infection. Fever and lethargy are common in disseminated infection and CNS disease and vesicles may not develop.

Cutaneous candidiasis: Cutaneous candidiasis may be lethal in neonates and infants. Cutaneous candidiasis in newborns occurs in two forms; congenital cutaneous candidiasis (CCC) acquired in utero and neonatal candidiasis acquired during passage through infected birth canal. Congenital form of infection classically presents as generalized erythematous macules, papules and/or pustules predominantly over back, extensor extremities, skin folds and almost always involving palms and soles. The diaper area is usually spared and oral mucosa rarely involved. The lesions generally resolve with desquamation within 1-2 weeks [39, 40]. Neonatal candidiasis is usually localized to oral cavity and diaper area and presents after 7 days of life. However, in

extremely low birth weight infants, neonatal candidiasis may present as invasive fungal dermatitis [41]. In term infants, CCC follows a benign and self-limited course. CCC and neonatal candidiasis can progress to systemic candidiasis in those with certain risk factors [40], thereby causing increased mortality [42].

Other conditions with infectious etiology which can be fatal include eczema herpeticum (Kaposi's varicelliform eruption) (figure 3), Waterhouse-Friderichsen syndrome, Rocky mountain spotted fever, post-varicella cerebellitis, post-infected scabies glomerulonephritis, to mention a few [30].

v. Drug reactions

Drug reactions may cause emergency situations in the form of DRESS (drug reaction, eosinophilia and systemic symptoms), anaphylaxis, Toxic Epidermal Necrolysis and Stevens Johnson's syndrome. Most common among these in different studies are Stevens-Johnson syndrome (SJS)/toxic epidermal necrolysis (TEN) (figure 4). Both SJS and TEN are immune complex mediated blistering conditions of the skin associated with drugs, infections and certain miscellaneous conditions. It is believed that they both represent different spectra of the same disease with TEN being the most severe form, with epidermal detachment greater than 30% and a mortality of 15-40%, while in SJS, epidermal detachment is less than 10% of body surface area [43,44].

Most common incriminating drugs for such reactions are antibiotics, anti convulsants and non steroidal anti inflammatory drugs, as these are the most commonly prescribed drugs in pediatric age group [30].

vi. Connective tissue diseases

Connective tissue diseases like acute lupus erythematosus, dermatomyositis (with pharyngeal muscle weakness), anti-phospholipid antibody syndrome, eosinophilic fasciitis, scleredema, to mention a few, may present as emergency situation, although rarely than in adults [30].



Figure 3. Clinical photograph of eczema herpeticum in children



Figure 4. Clinical photograph of SJS & TEN

vii. Metabolic conditions

Metabolic and nutritional disorders like multiple carboxylase (holo-carboxylase synthetase and biotinidase), essential fatty acid and essential amino acid deficiency may be life threatening and primary dermatological emergencies. [45]. Metabolic conditions like multiple carboxylase and essential fatty acid deficiency can present in infancy as erythematous-squamous rash progressing to involve whole body.

viii. Congenital and hereditary dermatoses

Important congenital dermatoses presenting as emergency situations, some of which have already been mentioned are epidermolysis bullosa, Harlequin ichthyosis, collodion baby, ulcerating haemangioma and vascular tumors, neonatal purpura fulminans due to protein C deficiency, erythroderma in severe combined immunodeficiency [30].

ix. Vasculitis

Various forms of vasculitis, especially those associated with systemic involvement may be lethal, unless managed urgently [5].

x. Dermatological reactions associated with NICU include phototherapy induced erythema and chemical burns [5].

xi. Miscellaneous

Kasabach-Merritt phenomenon: Kasabach-Merritt phenomenon (KMP), a primary emergency dermatoses with mortality of 20-30%, is a clinical syndrome of thrombocytopenic coagulopathy in association with vascular tumor, especially tufted angioma and Kaposi's haemangio-endothelioma [46,47]. It is usually seen in infants less than 3 months of age, and caused by sequestration of platelets, accumulation of activated coagulation factors and local fibrinolysis in the tumor.

Purpura fulminans: Purpura fulminans (PF) is an acute syndrome characterized by rapidly progressive skin necrosis and disseminated intravascular coagulation (DIC) [48]. Hereditary (congenital) protein C deficiency, an autosomal

recessive disorder, manifests at birth. Acute infectious PF in neonates is commonly caused by group B streptococcal septicemia and also Gram negative septicemia [49]. Other causes include those secondary to rickettsial infection and systemic inflammatory response syndrome (SIRS) [30].

Kawasaki disease: Kawasaki disease (KD) is a systemic vasculitis predominantly affecting younger children less than 4 years of age with peak age of onset of 6 to 11 months [50]. Classical presentation of KD are high grade fever not relieved by antipyretics, generalized erythematous maculopapular rash, bilaterally symmetrical non-pitting edema of hands and feet, fissuring of lips, reddish discoloration of tongue and non-purulent bilateral bulbar conjunctivitis [50]. KD with subsequent complications (especially cardiac) may be fatal and life threatening.

Sclerema neonatorum: Sclerema neonatorum, regarded as end stage of severe systemic disease, is an uncommon, life-threatening condition, usually of neonates and infants, with a case-fatality rate ranging from 50 to 100% [6].

It is characterized by sudden onset diffuse hardening of skin initially involving lower legs and later spreading to thighs, buttocks, trunk and cheeks. The palms, soles and genitalia are usually spared [51].

Others: Erythromelalgia, a condition of painful red extremities with burning associated with vasodilatation of the skin, with attacks lasting for few minutes to several hours, may presents as an emergency situation, as also disseminated Langerhans cell histiocytosis [30].

xii. Emergencies related to sexually transmitted diseases (STDs)

Emergency situations specific to STD in pediatric age group include paraphimosis, phimosis, phagedenic ulceration, Jarisch-Herxheimer reaction due to Penicillin therapy in syphilis, along with extreme psychological anxiety and suicidal ideation.

xiii. Emergencies related to leprosy

Epididymo-orchitis due to lepra reactions, dapsone syndrome, acute abdomen due to clofazimine and 'flu' like syndrome due to rifampicin are some of the important dermatological emergencies related to leprosy.

xiv. Emergencies related to dermatology surgery procedures

Cutaneous surgical procedures are usually performed under topical, local, or regional anesthesia (nerve blocks) and as such diagnostic and therapeutic procedures performed in dermatology rarely precipitate a crisis, yet emergency situations can arise. The most common ones are described below.

Anaphylaxis and anaphylactoid reactions: In dermatological set up [54], anaphylactic reactions could be due to preoperative antibiotic prophylaxis with penicillin or cephalosporin, local anesthesia infiltration with an ester anesthetic [55,56], or lidocaine with methylparaben [57-59] (see Lidocaine "Allergy" below), bacitracin [60,61], neomycin [62], topical nitrogen mustard [63], chlorhexidine [64, 65] and natural rubber latex (surgical gloves).

Anaphylaxis is immunoglobulin E (IgE) mediated generalized multi organ allergic reaction characterized by rapid evolution of cutaneous features like diffuse erythema, pruritus or urticaria, followed by inspiratory stridor, laryngoedema, bronchospasm, hypotension, cardiac arrhythmias, or hyper peristalsis. Anaphylaxis is a potentially life threatening event [52]. Anaphylactoid reactions are clinically similar, but are not IgE mediated, most commonly caused by radio-contrast media, aspirin, non steroidal anti-inflammatory agents, opioids and muscle relaxants [53]. Prompt recognition is the key to anaphylaxis management.

Vasovagal Syncope [66]: It is far more prevalent than anaphylaxis. Emotional stress, acute pain and fear are precipitating factors [66].

Lidocaine allergy: True allergic reactions to pure lidocaine, an amide anesthetic agent, are

extremely rare [57-59]. Reactions mostly occur to the ester group of anesthetics like procaine, tetracaine, and benzocaine, derivatives of para-aminobenzoic acid (PABA), an established allergen. However, methyl and propyl paraben, sulphite preservatives added to lidocaine bottles cross react with PABA causing type IV (delayed type) sensitivity to lidocaine, 2 days following exposure [67,68]. True allergic reactions to lidocaine are to be distinguished from toxic reactions resulting from over dosage (central nervous system or myocardial depression or excitation, perioral numbness, nausea, seizures, coma) and vasovagal reactions. Anxiety regarding the use of needles and/or the effects of frequently added epinephrine in lidocaine vials can lead to palpitations, panic attacks and vasovagal events that the patient may long remember as an allergic reaction. Patch testing and intradermal challenge assist in the evaluation of type IV sensitivity [69, 70].

Status Epilepticus: Dermatologists encounter pediatric patients whose cutaneous disease has potential epileptic manifestations, most notably those with tuberous sclerosis, neurofibromatosis, sturge-weber syndrome. There is a risk of office seizures and also status epilepticus [71, 72]. The dermatologist can provide essential basic support in such emergency situations.

Acute skin failure [73]

Most of the dermatological conditions described above are lethal because they result in acute skin failure due to structural and functional alterations in the skin which leads to failure of skin to perform its multiple functions which can subsequently lead to deleterious systemic effects such as acute failure of heart, lung, kidney and other organs.

Effects of acute skin failure: Some of the major consequences of skin failure are mentioned below [73].

Decreased intravascular volume: It has been estimated that destruction of stratum corneum, the layer mainly responsible for the barrier function of the skin, due to various dermatoses can cause up to 40 times increase in fluid loss.

50% body surface area (BSA) involvement leads to daily fluid loss of up to 4-5 liters. Loss of proteins (40 gm/L), Na (120-150 mmol/L), Cl (10-90 mmol/L) and K (5-10 mmol/L) may also accompany and cause decrease in intravascular volume [73].

Renal failure: Renal impairment may result because of decreased intravascular volume associated with decrease in urinary output and increased blood nitrogen.

High output cardiac failure: Increased cutaneous blood flow nearly doubles the cardiac output and may prove fatal, particularly in the elderly and in those with compromised cardiac reserve.

Sepsis and septic shock: Systemic infection, severe sepsis and shock may occur because the damaged skin and its exudates along with altered immunological function support growth of a wide spectrum of endogenous and exogenous organisms.

Impaired thermoregulation: This may result in either hyper or hypothermia depending on the surrounding environment.

Protein loss: Loss of proteins in the exudates leads to hypo-albuminaemia.

Hyper-catabolic state and insulin resistance: Skin failure with associated metabolic effects leads to a hyper catabolic state which increases energy expenditure by 2-4 times. Inhibition of insulin secretion and insulin resistance lead to hyperglycemia and glycosuria, which cause amino acid breakdown leading to further worsening of hyper-catabolic state.

General management of acute skin failure [73, 74]

Management of dermatological emergencies involves immediate diagnosis through relevant investigations and providing specific therapeutic measures thereafter. As most of the fatality related to these emergencies is because of skin failure, immediate and prompt initiation of management on the lines of 100% burns is of primary importance. Besides this, appropriate double barrier nursing care is equally important.

This may be done better in intensive care setting till patient recovers from the emergency situation. Multi-disciplinary approach with synchronized team of dermatologist, pediatrician, critical care physician and skilled nursing staff is advisable [6, 74]. General principles of management are briefly mentioned below [73, 74].

Cleaning measures: Various cleaning measures like proper hand washing, gloves wear by doctors, nurses and attendants, floor cleaning, linen care, strict sterilization measures, separation of dirty and clean utility areas are mandatory for preventing transmission of cross infection.

Proper nursing: Nursing at a temperature of 30-32°C, and air fluidized bed is helpful. Care of mucous membranes like eyes, nose, mouth, genitals etc. is essential in order to decrease morbidity resulting from infections, adhesions, scarring. Regular change of posture to prevent bed sores, along with physiotherapy and psychological counseling are vital. Help from other specialists can be taken.

Monitoring: Regular monitoring and maintenance of heart rate, pulse rate, temperature, urinary volume (50-100ml/hr), urinary osmolarity, glycosuria, extent of skin lesions, body weight and gastric contents is of vital importance.

Haemodynamic and electrolyte homeostasis: Correction and maintenance of haemodynamic and electrolyte equilibrium by fluid and electrolyte administration is of prime importance [75].

Nutritional support: Aggressive nutritional support by providing energy, protein and micronutrient supplementation may be required in order to compensate the hyper-catabolic state and to promote tissue healing.

Topical medications and dressings: Topical antiseptics like silver sulphadiazine (contraindicated in patients sensitive to sulpha drugs) should be applied after proper bath/ soaks with potassium permanganate solution. Topical application of wet dressings and bland emollients

such as petrolatum or white soft paraffin helps in maintenance of barrier function of stratum corneum.

Investigations: Repeated arterial blood gas analysis, complete blood count, blood urea, creatinine, glucose, electrolytes, albumin, liver function tests, complete urine examination, electrocardiogram and chest radiograph are essential. Culture from skin lesions and venous line is desirable for appropriate antibiotic selection. This may or may not be repeated depending on the clinical and microbiological response to antibiotic therapy.

Antibiotic use: Judicious use of antibiotics/ antimicrobials is a must to avoid strain selection, fungal infection and drug reactions. Sudden rise or fall of temperature, deterioration of consciousness, oliguria, accelerated pulse, tachypnoea, increase in insulin requirement and gastric residual volume indicate need for antibiotics in absence of pus/ blood culture results, otherwise wait for culture / sensitivity.

Specific therapy: Specific therapy depends on the underlying cause.

Conclusion

In conclusion, Dermatological emergencies in children are not uncommon, but worldwide, limited studies have been done to study the spectrum of such emergencies. Knowledge about those pediatric dermatoses which may primarily present as emergency situations, and also those secondary to underlying systemic conditions and dermato-surgical practice, is mandatory so that such conditions are diagnosed early and managed promptly, thus decreasing mortality and morbidity associated with these. In order to accomplish this there should be a close liaison, and hand in hand working between dermatologists and pediatricians.

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