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ABSTRACT

A 3 years old child with a history of ingestion of Paracetamol tablet due to fever Presented with rashes all over the body, nikolsky sign positive diagnosed as toxic epidermal necrosis, was treated With supportive management antibiotics and dexamethasone nursed on banana leaves which were autoclaved, the child improved within 10 days.

Keywords: Paracetamol, Nikolsky sign, Toxic epidermal necrosis.

1. INTRODUCTION :

Stevens-Johnson syndrome and Toxic Epidermal Necrolysis are the most concerning drug reactions affecting adults and children [1]. They are rare but severe reactions that predominantly involve the skin and mucous membranes and are considered medical emergencies as they are potentially fatal. Drugs are identified as the main cause of SJS/TEN causing 77-95% of cases commonly implicated drugs being antimicrobials, anti-epileptic drugs and non-steroidal anti-inflammatory agents (NSAIDs). Mycoplasma pneumoniae and Herpes simplex virus infections are other well documented causes [2], [3]. Their overall annual incidence has been reported in 1–10 cases/ 1 million, of which 20% are paediatric cases. Mortality rates in SJS range between 1% and 4%, whereas in TEN it increases to between 25% and 35%, being somewhat lower in children [1]. The treatment of SJS/TEN includes supportive care, monitoring of fluids and electrolytes, barrier nursing care, and control of infection. The use of steroids and other immunosuppressive therapy still remains controversial [4].

2. CASE REPORT :

A 3 years old child came with H/O consumption of paracetamol tablets for fever as per the dosage, following which the child

developed rashes, maculopapular, with itching, rashes turned more severe with bullous exfoliation of epidermis and extensive necrosis. On examination 85 % of Surface of the body was full of bullae, extensive defoliation and necrosis. Nikolosky sign on initial assessment, HR – 120 bpm, RR – 50cycles/minute BP – 70/40mm Hg Weight - 12kgs, height -90 cms, HC – 49cmsS/E was normal. The investigations revealed neutrophilic leucocytosis, normal electrolyte and creatinine levels. 1ST day of hospitalization child needed fluid resuscitation fluid after adequate fluid replacement, BP also got stabilised, Treatment pattern was multidirectional involving, Replacement of fluids, maintenance of electrolyte imbalance ,Antibiotic therapy (inj Augmentin 80mg/kg/day in divided doses), Inj metronidazole 6mg/kg/dose TID, Inj amikacin 20mg/kg/day single dose OD .On dermatological consultation, Inj dexamethasone 4mg IV BD X7days Silverex Ointment L/A BD. Child was nursed in banana leaves which was presterilized, child improved within 10 days and was discharged, no sequelae on follow up.

3. DISCUSSION :

Cutaneous adverse drug reactions can be caused by a wide variety of drugs. The incidence of adverse drug reactions in hospitalized children is 9.5% [4]. TEN and

SJS are considered to be two ends of a spectrum of severe epidermolytic adverse cutaneous drug reactions, differing only by their extent of skin detachment. These are characterized by mucocutaneous tenderness and hemorrhagic erosions, erythema and epidermal detachment presenting as blisters and areas of denuded skin [2]. Stevens–Johnson syndrome/toxic epidermal necrolysis in children does not differ significantly from adult SJS/TEN. Although drugs are the most common culprits in both children and adults, the likelihood of infections like Mycoplasma and Cytomegalovirus inducing SJS/TEN is relatively higher in children as compared to adults. Sulphonamides, penicillins and nonsteroidal anti-inflammatory drugs anticonvulsants are more commonly implicated in drug-induced pediatric SJS/TEN. Stevens–Johnson syndrome and toxic epidermal necrolysis rarely cause mortality in children, but significant morbidity is seen [5].

The management includes withdrawal of the offending drug, prompt institution of supportive therapy, preventing infection and management of complications [5]. Corticosteroids, intravenous immunoglobulin and cyclosporine have been utilized for specific therapy of pediatric SJS/TEN in various studies [6 - 8]. SJS/TEN is a life threatening condition and therefore supportive care is an essential part of management. A major part of supportive care consists of the management of fluid and electrolyte requirements. Intravenous fluid is given to maintain urine output. Wounds are treated without skin debridement as blistered skin acts as a natural biological dressing which helps in re-epithelialization [2],[9]. Dressing of the denuded area is done with paraffin or petrolatum gauze, with or without antibiotic impregnation. Adhesive dressings and topical sulfa containing medications are to be avoided. Frequent changes in patient position and water bed are recommended which helps in quick recovery [5]. In this child, as the child did not have any reaction to syrup paracetamol, the reaction which happened to the child could be due to the content “sunset yellow” in paracetamol tablet. Due to the financial constraints of the patient we nursed the patient with autoclaved banana leaves. The patient

responded very well without any sequelae.

4. CONCLUSION :

Toxic Epidermal necrosis in children is often fatal when large surface of skin is affected, in this child nursing on banana leaves, the drug trigger being paracetamol tablet, the complete recovery of the child are the unusual features to be noted in this child.

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