

Objectives

Demonstrate the usefulness of delayed decontamination with Diphoterine® solution after chemical insult.

Methods

In a retrospective study of patients admitted to the Liege Burn Centre, Belgium, among half of the patients with chemical injury suffered as a result of a domestic accident. They had no decontamination with the Diphoterine® solution, only in a few cases with water. In some cases regarding industrial accident, there was no decontamination on site at time of accident. At the hospital, we performed a delayed decontamination with Diphoterine solution, sometimes several hours after the injury.

Results

Case 1 : 52 year old, Destop® (caustic soda) ingestion in the morning at about 10 o'clock splashed on face and right arm, admission at Burn center at 14h15. Rinsing lesions including lips and mouth with Diphoterine® solution on admission



Case 2 : laboratory assistant is splashed with phenol on left forearm at 1 pm. Polyethylene glycol is applied in the laboratory. He comes to burn centre 2 hours later with persistent pain with erythematous blistered skin lesion. We perform a delayed washing with Diphoterine® solution and observe the disappearance of blisters and pain. The wound is dressed with paraffin gauze. The next day the wound is completely healed.



Case 3 : accident in the morning with potassium hydroxide, no rinsing; first consultation in the evening at burn centre where delayed washing with Diphoterine® solution is achieved.



Case 4 : splashed with sodium hydroxide (NaOH) at the factory, rinsed first with water at the site of accident and then decontaminated with Diphoterine® solution at the infirmary. Arriving at the burn centre with remaining pain. Secondary decontamination with Diphoterine® solution until recovery of pH of skin and almost disappearance of the lesions.



Case 5 : an 18 months old child is splashed with caustic soda on his right leg. He arrives at the burn centre one hour later after the accident. Delayed decontamination with Diphoterine® solution performed. 2 weeks later, the wound starts good healing.



Conclusion

A delayed washing with Diphoterine® solution is indicated, but the results of course will not be as good as in an immediate decontamination. This being said, we have nevertheless, observed better results with Diphoterine® solution than with those washed with water only. **Its use on children allows us to claim its innocuousness.**

