

Lysol Induced chemical Burns: An Underreported Rare Problem

Elan S.¹, Sudhanva H.K.², Aggarwal A.³, Chittoria R.K.⁴

^{1,3}Senior Resident ⁴Professor & Registrar (Academic), Department of Plastic Surgery, JIPMER, Pondicherry 605006, India.

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Abstract

Lysol is a commercially available product commonly used for cleaning and disinfectant purposes. Although in lower concentrations they may not causing ill effects on human being. In higher concentrations or in undiluted forms they will produce adverse health effects. Lysol induced skin burns are not commonly described in literature and no specific management protocols have been described. Here we are sharing our experience on Lysol burns and its management.

Keywords: Lysol; Chemical Burn.

Introduction

Lysol is a disinfectant brand distributed by Reckitt Benckiser and commonly used worldwide. The history of Lysol is quite interesting; it was introduced in 1889 by Dr. Gustav Raupenstrauch in Germany as a cure for the cholera epidemic. The original composition of Lysol was made up of cresols and phenols. The modern Lysol floor cleaner has a composition containing quaternary ammonium compounds benzyl-C 12-16-alkyldimethyl, chlorides and dodecyldimethylamine oxide and has a pH of around 10-10.5. It is a highly alkaline solution and thus has been associated with many health hazards. It is a particular health hazards for hospital workers where large quantities are commonly used [1].

Case Report

A 29 year old female patient presented to plastic surgery department with history of accidental spillage of Lysol over face and upper chest with burning pain of one hour duration. There was no history of any associated co-morbidities. On examination patient was found to have mixed second degree superficial & deep burns involving head & neck and upper part of trunk with eye burns (conjunctivitis & superficial corneal ulcerations) with no evidence of chemical inhalational burn (Figure 1). Patient was investigated and all parameters were found to be within normal range. The acute initial management included vitals monitoring, intravenous fluid (for hydration), copious saline irrigation of burn wounds. Later, burn wounds were managed by hydrojet debridement, autologous



Fig. 1: At admission

Corresponding Author: Ravi Kumar Chittoria, Professor & Registrar (Academic), Department of Plastic Surgery, JIPMER, Pondicherry 605006, India.

E-mail: drchittoria@yahoo.com

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platelet rich plasma (APRP) therapy, Low Level Laser Therapy (LLLT) and collagen dressing (Figure 2, 3). Chemical Eye burns including conjunctivitis and superficial corneal ulcerations were managed by ophthalmologist. All wounds including corneal burns completely healed by 10th post burn day (Figure 4).



Fig. 2: Application of low level laser therapy (LLLT)



Fig. 3: Application of Autologous Platelet Rich Plasma Therapy (APRP)



Fig. 4: Completely healed wounds

Discussion

Commercially available Lysol is combination of various chemicals and predominantly composed of Benzalkonium chloride, Sodium bicarbonate, hydrogen peroxide, Lauryl alcohol Ethoxylate, Cocoamidopropyl Betaine, Tetra Sodium EDTA which may cause denaturation of proteins of mammal cell wall resulting in cell death [1]. Lysol has been associated with health hazards associated with ingestion, skin exposure, and eye contact. Reports of inhalational exposure and damage have also been documented. There is no specific neutralizing agent described for Lysol burns [2]. There are very few reports of Lysol burns from India but there is no separate article discussing exclusively about Lysol burn treatment [3]. Conventionally treatment include plenty of water or saline irrigation followed by medical and occasionally surgical management. Through this article author conveying the latest modalities & their application in the management of Lysol burns. These adjuvant therapies like APRP, low level laser therapy not only accelerates wound healing but also prevents complications like hypertrophic scarring & keloids [4,5].

Conclusion

Even though Lysol is very commonly used product, the burn associated with Lysol is under reported. One should manage Lysol burns with conventional & adjuvant therapies of wound healing.

Conflicts of Interest

Nil

Reference

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Standard journal article

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