



<b>Abstract Title:</b>	<b>Self-Inflicted Chemical Burns Caused by Depilatory Cream Use: The Price of Beauty</b>
<b>Author and Co-authors:</b>	Rachel H.Y. Park, BA, Medical Student-4; Trevor C. Hansen, MD; Derek E. Bell, MD University of Rochester Medical Center, Kessler Burn Center, Rochester, NY
<b>Objective:</b>	Upon completion of the lecture, attendees should be better prepared to: <ul style="list-style-type: none"><li>▪ Recognize and describe the serious health risk of depilatory products</li><li>▪ Educate others on the mechanism of depilatory cream burn</li></ul>
<b>Abstract:</b>	<p><b>Introduction:</b> Some men and women will brave inconvenience, discomfort, and even pain, in the name of beauty. One such example of this discomfort is the practice of using caustic chemicals to dissolve hair in a process called depilation. Depilatory products utilize thioglycolates to disrupt disulfide bonds found in hair follicles, effectively “melting” the hair. 1 These bonds are also found in the epidermal skin layer, so while hair is the primary target, the skin may also be affected. Moreover, these products use NaOH or CaOH to raise the working pH of the product, which increases the efficacy of the thioglycolate but also increases the risk of chemical burn. As depilatory agents became more ubiquitous, we have seen an anecdotal rise in the number of resultant chemical burns.</p> <p><b>Methods:</b> A retrospective chart review for cases of burn caused by hair removal products between February 2011 and December 2017 was performed from a single American Burn Association (ABA) verified burn center registry. The study protocol was reviewed and approved by the institutional review board. All patients with chemical burn secondary to hair removal product use were included. Patient demographics, presentation, course and length of hospitalization, social history, and follow-up care were analyzed.</p> <p><b>Results:</b> A total of seven patients meeting the inclusion criteria were identified, including six females and one male. Six patients were identified between 2015 and 2017 and one patient in 2013. Patient age ranged from 3 to 43 with a mean age of 27.2. Total body surface area (TBSA) of the burns ranged from 0.18% to 0.79% including first and second degree burns; none of the patients acquired third degree burn. The majority of the injuries were located in genital/ groin area; other areas of injury included dorsal wrist and cheeks. All of the injuries occurred after use of chemical depilatory cream. All of the patients were treated by wound cleaning, mechanical debridement, antibiotic ointment, sterile petroleum gauze dressings and gauze pads. None of the patients required inpatient care. Six of the patients were arranged to follow up and three patients were lost to follow up. All of the patients</p>

who presented to follow up visits showed re-epithelialization and good wound healing. One patient did not require a follow up visit because his wound only consisted of first degree burns.

**Conclusions:** Depilatory cream is a corrosive chemical hair removal agent that can lead to unintended chemical burns if used improperly. Patients are often female, who present with partial thickness chemical burns to the groin area after using these products for pubic hair removal. All of the burns had TBSA less than 1% and healed well with standard wound care. Burn care providers should be aware of this unusual cause of chemical burn and educate their patients appropriately.

**Disclosure:**

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