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728 **Chemical Burns and Eyebrow Tinting: An Unusual Case**

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**Introduction:** Here we present the case of chemical burns following professional eyebrow tinting, a phenomenon rarely described in the literature.

**Methods:** A 50-year-old previously healthy female presented to our emergency department for evaluation and treatment of chemical burns to her eyebrows. Fifteen days prior, she underwent professional eyebrow tinting by a local esthetician. Blistering developed the following day, and progressive swelling prompted her to present to an outside hospital. There she was prescribed acyclovir, ketoconazole cream, and silver sulfadiazine, but despite these measures, her symptoms progressed, leading to her presentation to our facility. Both brows were remarkable for significant swelling with exudative crusting on the surface concerning for superficial infection of partial-thickness chemical burns. She was prescribed bacitracin, prednisone, and clindamycin and discharged with instructions to follow up in burn clinic. Six days later, both brows had developed 2x3 cm scabs, but no signs of infection were appreciated. She was instructed to apply bacitracin/polyomyxin B ointment to the scabbing areas and open wounds. Forty-nine days after her tinting, both brows were noted to be completely healed with no alopecia.

**Results:** Burns following cosmetic procedures most commonly occur during hair lightening treatments where products frequently contain caustic chemicals such as hydrogen peroxide or persulphates leading to oxidation reactions lightening the hair. Thermal burns in hair salons have also been reported to heated hair-dressing instruments or external heat to hasten the highlighting process.

The periorbital area is becoming an increasingly popular target for nonsurgical cosmetic procedures, including permanent eyelid tattooing, eyelash dying, and extensions, more recently, eyebrow tinting. Eyebrow tinting involves the application of semipermanent dyes to give the appearance of a fuller brow. There are no FDA-approved brow tinting formulations, and many contain para-phenylenediamine (PPD), a dying agent frequently associated with allergic dermatitis and less commonly chemical burns. This patient underwent brow tinting in a professional setting and still experienced a chemical burn. As the popularity of brow tinting increases, some patients will undoubtedly seek out readily available, unregulated products for self-application. The potential for dermatitis and chemical burns following eyebrow tinting will only increase.

**Conclusions:** Eyebrow tinting is not a benign cosmetic procedure, and even professional application of dyes may lead to chemical burns. We believe an increased awareness of brow tinting and its potential complications is warranted given its increasing popularity, the preponderance of unregulated products, and the potential for poor cosmetic outcomes.

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729 **"Feets" of Strength: How Glabrous Skin Defied the Odds**

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**Introduction:** 58 year old female with past medical history notable for IDDM with peripheral neuropathy presented to ER after stepping barefoot onto asphalt in August 2020. Patient initially presented to community ER who performed bedside debridement and referred patient to wound clinic for management. After presenting to wound clinic, patient was referred to Burn center. She arrived 10 days after burn and was found to have full thickness burns to the soles of bilateral feet, 3% TBSA. The majority of the soles of both feet were injured. The patient had little residual glabrous skin which was uninjured. Glabrous skin is highly specialized skin and grafting non glabrous skin to the soles of the feet does not have optimal functional outcomes.

**Methods:** The patient was extremely compliant and willing to do whatever was necessary to maintain function. The patient underwent one debridement, two debridements with allografting, and one debridement with wound vacuum application. Wounds were initially treated with daily silvadene dressings and transitioned to daily damp to dry and finally to daily xeroform dressings. Wounds were measured at each follow up appointment, plan was made to intervene only when wounds stopped showing progress, however this plateau was never reached, and wounds were allowed to heal without any further intervention.

**Results:** One year post burn, the right sole is fully healed while the left sole remains with small open area. The patient does have significant alterations to her gait pattern. However, the patient has managed to heal her wounds and is functioning independently.

**Conclusions:** Given patient's IDDM, her perceived chances of healing a graft was low. Furthermore, her risk of infection and eventual amputation was high. Given a very compliant patient and diligent wound care, the patient was able to achieve significant healing of wounds without the need for amputation. Glabrous skin is specialized skin and grafting non glabrous skin to the soles of the feet does not have optimal functional outcomes. Allowing the patient's own glabrous skin to pull across the bed and heal has provided for optimal functional outcomes.