



Scalp burn: Attention to cosmetics

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Abstract

Hair highlighting procedures are very common throughout the world. While rarely reported, potential adverse events can occur. We report the case of a 34 years old femal adult who underwent a hair highlighting procedure at local salon and sustained a chemical burn to the scalp.

Keywords: Scalp, burn, sustained a chemical

Introduction

Hair highlights are quite common procedures carried out in hair salons by using a mixture of a lightening powder containing persulfates with a suspension containing hydrogen peroxide.

However, scalp burns secondary to hair styling procedures are rarely reported in medical literature.

We report a case of female adult who underwent a hair highlighting procedure at local salon and sustained a burn to the scalp.

The burn etiology, clinical features, the expected sequelae, and a review of the literature are described.

Case report

A 34-yr-old female adult underwent a hair bleaching procedure at a local hairdressing salon. It was not the first time, and the patient had no known allergies.

To dye her hair blonde the professional hairdresser applied an unknown product.

Subsequently the patient's hair was covered with a plastic cap and her head placed under a hood dryer for about 1 hour. During the whole procedure the patient did not feel any pain.

After the procedure, the skin changes became red and very painful.

She first took paracetamol then applied some traditional herbs that only worsens the situation, then she was seen in the emergency room where we found the presence of a black crust at the level of the scalp (figure 1) that was removed, under which we find a well-limited ulceration, rounded purulent in places making about 4 cm of major axis.(Figure 2)

Initially, the burn site was thoroughly cleaned, then the patient was put under analgesic and antibiotic therapy. 2 days later, we started the silver nitrate and the Check-ups weeks later on showed definitive cicatricial alopecia (Figure 3).



Fig 1: A black crust at the level of the scalp



Fig 2: A Well-limited ulceration, rounded purulent in places Making about 4 cm of major axis.



Fig 3: Definitive cicatricial alopecia

Discussion

Hair highlighting using chemical solutions to alter the pigmentation of hair is a popular procedure. Given their chemical properties, these solutions also are potentially caustic to the scalp [1, 2]. However, the actual incidence and range of injuries is not well reported in the literature [3, 4].

To our knowledge, it's the second case described in the literature in Morocco [5].

In all the described cases the procedure involved the following steps: (i) decolorizing of the melanin pigments; (ii) exposure to a low temperature hair dryer to accelerate the bleaching and (iii) rinsing the hair with water and washing with a neutralizing shampoo [6].

In the vast majority of cases, the scalp lesions are located behind the skull (occiput) or at the highest point of the cranial vault (vertex), rarely on the nape of the neck [7].

Scalp burns are either thermal or chemical burns. Thermal burns are caused by direct heat application. Chemical burns result from caustic chemicals. A caustic reaction from the chemicals applied may result in irritant dermatitis, superficial chemical burns, and also deep burns [8, 9, 10, 11].

The main differential diagnoses include bacterial and fungal infections, pemphigus, squamous cell carcinoma and dermatitis artefacta, but the acute installation and the notion of capillary discoloration makes it possible to correct the diagnosis [19].

According to this observation, I recall that a good interrogation is fundamental and we must always keep it in mind, especially since we are in a country known for the use of several herbs and chemical products.

Conclusion

This very severe case reminds us of the toxic potential of some hair care chemicals and emphasizes the necessity for hairdressers to follow the recommended procedures with care in order to avoid injuries.

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