SEVERE ALLERGIC HAIR DYE REACTION

Coloring of hair can cause severe allergic contact dermatitis. The most frequently reported hair dye allergens are p-phenylenediamine (PPD) and toluene-2.5-diamine.

We present a 20-year-old man who came to emergency room with head and face edema. His head and neck skin was diffusely erythematous, oozing with blisters and crusts. Some of the crusts on the back of his neck were pyodermic. Submandibular and nuchal lymph nodes were swollen and painful. Three days before he used hair dye on his hair for the first time in life.

He was treated with local corticosteroid creams. On the second day, antibiotics were administered by oral route because of severe bacterial superinfection. He was advised to wash his hair frequently with mild shampoos and to have hair cut if possible.

Two months after skin changes had resolved, we performed patch test to European standard and hairdresser series, and to the hair dye he had used to dye his hair. He showed positive reaction to PPD, anestesin-benzocaine, thiuram mix, coal tar and his hair dye.

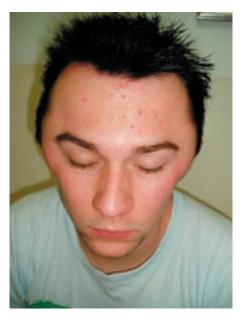


Figure 1. Head and face oedema



Figure 2. Patch test positive reaction on five allergens

Hair dye allergy is one of the commonest causes of cosmetic dermatitis in men and women. Hair color products require patch test before application to determine if the individual is allergic to the product.

References

- McFadden JP, White IR, Frosch PJ, Sosted H, Johansen JD, Menne T. Allergy to hair dye. BMJ 2007;334:220.
- 2. DeLeo VA. p-Phenylenediamine. Dermatitis 2006;17:53-5.
- Dawe SA, White IR, Rycroft RJ, Basketter DA, McFadden JP. Active sensitization to paraphenylenediamine and its relevance: a 10year review. Contact Dermatitis 2004;51:96-7.
- 4. Fautz R, Fuchs A, van der Walle H, Henny V, Smits L. Hair dye-sensitized hairdressers: the cross-reaction pattern with new generation hair dyes. Contact Dermatitis 2002;46:319-24.

Suzana Ljubojević, MD, PhD Prof. Jasna Lipozenčić, MD, PhD Zdenka Zorić, MD

University Department of Dermatology and Venereology, Zagreb University Hospital Center, and school of Medicine Zagreb, Croatia suzana.ljubojevic@zg.hinet.hr