

## 'Mislabelled' Make-up Remover Gave Facial Eczema in Female Patients

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**Incorrectly labelled cosmetic wet wipes can cause severe eczema, leading to major concerns amongst the public. Read below what was revealed by chemical analysis in a laboratory in Malmö, Sweden.**

During the last year we have seen around 10 female patients with facial eczema, sometimes on the eyelids, but also as patchy eczematous lesions on the cheeks, chin and chest. The index patient was a 33-year-old non-atopic female catering assistant who had worked in a restaurant for several years without any skin problems (1). She was referred because of hand eczema and something diagnosed as angioedema of 1.5 years duration. The "angioedema" had been treated intermittently with internal corticosteroids and oral antihistamines without success. A patch-test 2 years prior to presentation due to hand eczema had shown contact allergy to fragrance mix 1, nickel sulphate, and methylchloroisothiazolinone/methylisothiazolinone (MCI/MI). Despite having avoided these allergens her hand eczema had not disappeared. At presentation she showed a photograph of her "angioedema" (Fig. 1). When patch-tested with the Swedish baseline series (Chemotechnique Diagnostics, Vellinge, Sweden) she reacted to methylchloroisothiazolinone/methylisothiazolinone (MCI/MI) 200 ppm (+++) and to MI alone 2000 ppm (+++). On questioning, she reported having used make-up remover wet wipes (Gunry AB, Kungsbacka, Sweden) at the time she had had her "angioedema", which looked like eczema from the photographs (Fig. 1). Patch-testing with the wipes "as is" was negative. The wipes were not labelled as containing MCI/MI; therefore we carried out chemical analysis in our laboratory, which revealed that they contained 50–60 µg MCI/MI per wet wipe. The patient also found a shampoo that they used at home containing MCI/MI. The patient's facial and hand eczema healed completely when she avoided using these wipes and shampoo.

This case was reported to the Medical Products Agency in Sweden and, as a result, the company was prohibited from distributing or selling their 3 brands of wet wipes (2 make-up remover wet wipes and 1 wet wipe) in Sweden from February 2015. None of the 3 wet wipes were labelled with the MCI/MI content. According to the manufacturer the wipes were suitable for all skin types. The wipes were also dermatologically and ophthalmologically tested. Since the first case we have

seen another 10 MCI/MI-allergic patients with similar facial skin lesions, all due to the use of MCI/MI-containing make-up remover wet wipes from the same company, none of which were labelled as containing MCI/MI. In the patients who were patch-tested for the wipes "as is", the tests were negative.

Without chemical analysis it would have been impossible to determine the cause of these patients' dermatitis. The MCI/MI concentration in the wipes was sufficient to elicit allergic contact dermatitis.

The clinical picture in several of these cases was very similar, with more oedematous than eczematous lesions, due to the thin loose tissue around the eyes, similar to paraphenylenediamine (PPD) allergy seen in hair-colouring procedures. MCI/MI as well as MI contact allergy is very common nowadays, probably due to the use of MI in products such as wet wipes. In 2013, the trade association of European cosmetics manufacturers, Cosmet-



Fig. 1. Oedematous and erythematous eyelids in the index patient after use of methylchloroisothiazolinone/methylisothiazolinone (MCI/MI)-containing make-up remover wet wipes.

ics Europe, was already alerting its members to stop using MI in “leave-on” products and wet wipes belong to this category.

It is of vital importance that cosmetics are correctly labelled, so that people can rely on what they apply to their skin. Most of the patients reported here did not suspect that their eczema was caused by the wipes. The clinical picture also tricked one dermatologist into a misdiagnosis of angioedema.

As a result of this experience we always ask our female patients with facial eczema if they use wet wipes. These patients should always be patch-tested with the European baseline series containing MCI/MI 200 ppm and MI 2,000 ppm. These 2 preservatives are known to cross-react (2).

In Denmark, Asthma and Allergy Denmark reported on 31 March 2015 that they had found unlabelled MI in 5 types of

wet wipes, hand and face wipes, including ones marketed for children, and that all of the wet wipes reported came from the same manufacturer in China. Another 9 brands of wet wipes also came from the same factory, but chemical analysis had not yet been carried out. The analysed wet wipes have been withdrawn from the market.

## References

1. Isaksson M, Persson L. “Mislabelled” make-up remover wet wipes as a cause of severe, recalcitrant facial eczema. *Contact Dermatitis* 2015 Mar 27. doi: 10.1111/cod.12390. [Epub ahead of print] PubMed PMID: 25818021.
2. Isaksson M, Gruvberger B, Bruze M. Patch testing with serial dilutions of various isothiazolinones in patients hypersensitive to methylchloroisothiazolinone/methylisothiazolinone. *Contact Dermatitis* 2014; 70: 270–275.

