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RESEARCH LETTER

Anaphylaxis in an infant caused by menthol-containing cologne

To the Editor,

Severe allergic reactions to cologne or perfumes are rarely reported. Perfumes or colognes may aggravate respiratory symptoms in patients with asthma and they are also targeted as one of the most common causes of cosmetic allergic contact dermatitis.^{1,2} However, there is only one case of anaphylaxis to perfume reported in the literature.² We report the case of an infant who developed anaphylaxis after application of cologne to his face by his mother.

An otherwise healthy 2-month-old infant was admitted to the emergency department due to facial oedema, shortness of breath and cyanosis after application of menthol-containing cologne to his face. On physical examination, oedema of face, eyelids and lips and urticarial lesions on cheeks were noted. Cyanosis and respiratory distress were apparent. He was treated with intramuscular epinephrine, methylprednisolone, diphenhydramine and nebulised salbutamol. He was hospitalized for observation and discharged after his urticarial lesions and angioedema regressed. He had no history of wheezing, allergies or reactions to soap, perfumes or fragrances. There was no family history of atopy. The parents refused any diagnostic evaluation with the cologne or mint/menthol products. Avoidance of menthol-containing products was recommended to the parents.

Anaphylaxis is a severe life-threatening systemic allergic reaction that occurs suddenly after contact with an allergy-causing substance. To our knowledge, this is the first case of anaphylaxis caused by cologne in an infant. There has been only one case of anaphylaxis to perfume spray reported in a health-care worker.² One might think that reactions by cologne or perfume may be due to chemoreceptors. But as respiratory symptoms are concerned in the previous and in our case, we think that the mechanisms of these reactions

are IgE-mediated although this has not been proven. In our case, cologne might also enter systemic circulation quickly because of the thin skin of the infant besides its odour and mucosa related effects.

There are allergic reactions to menthol (cyclic alcohol derivative of mint) reported in the literature. Immediate hypersensitivity reactions to menthol ranges from urticaria and rhinitis to asthma.³⁻⁵ Anaphylaxis induced by menthol containing toothpaste has also been reported recently in a metazol allergic woman.⁶

This is a rare case of an infant with anaphylaxis to menthol containing cologne. It emphasizes the possibility of an allergen in a form of cologne and investigation of the contents could lead to the diagnosis in relevant cases.

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