

ALEX²® Case Study No. 10

Clemens, 35 years, from Leipzig, Germany



Clinical history

Clemens works as a surgical assistant and comes into contact with latex a lot due to his job. Over the years, he noticed that he developed severe dermatitis from contact with latex and rubber materials. Since then, he only used latex-free gloves and his skin problems improved.

Family history

No known allergies.

Present situation (2021)

Recently, Clemens reacted violently to contact with latex again. Short periods of contact are enough to trigger symptoms in him. When blowing up balloons, his lips often start to tingle, swell up and he notices a feeling of tightness and pain in his chest. Whenever he wears FFP3 mask models with a latex seal inside of the mask, the seal causes redness and swelling of the area of the face it touches. Recently, he transported a plastic spare part for his car. As soon as the spare part was in his car, his chest became tight, and he experienced severe breathing difficulties. His doctor then ordered a serological blood test using the ALEX²® allergy test.

ALEX²® Results

Allergen Source	Allergen	Biochemical destination	IgE Level (kUA/L)
	tIgE		156.14
Latex	Hev b 5	Unbekannt	56.12
Latex	Hev b 6	Pro-Hevein	87.44

Interpretation

- Sensitisation to latex (Hev b 5 and Hev b 6) was detected.

- Allergic symptoms associated with latex allergy range from contact urticaria to anaphylaxis. In latex-allergic health care workers, the most common symptoms include inhalation symptoms and local skin reactions.
- Hev b 5 is a structural protein whose biological function is unknown. It is the major allergen in several risk groups and is recognised by 92% (of latex-allergic) healthcare workers.
- Hev b 6 is a pro-hevein and may be involved in latex-associated food allergy.

Summary

The patient is recommended comprehensive patient education on avoidance measures and prescribed an emergency kit (including epinephrine auto-injector). The use of substitute products (e.g., nitrile gloves) is strongly recommended.