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LETTER TO THE EDITOR

Heat immersion therapy—A new approach for contact dermatitis to propolis?

To the Editor,

Recently, I summarised the current evidence on the treatment of bee stings in a German beekeeping magazine. One major aspect was the use of direct heat and heat immersion therapy. I discussed the study by Müller et al. who showed that patients who suffered from wasp, mosquito and bee stings had fast amelioration of symptoms after locally administrated concentrated heat.[1] An absence of symptoms was reported 10 min after administration. It was also discussed that the concept of heat treatment was found to be effective in a number of other scenarios, like in bluebottle (*Physalia* sp.) stings and acute jellyfish (*Carybdea alata*) stings.[2,3]

After publication of the article I was contacted by a 62-year-old beekeeper who wrote that he has kept bees since 1958 and has suffered from propolis contact allergy since 1985. In spite of this, he continued beekeeping, but reduced the number of attended bee hives and wore cotton gloves as a protective measure. Since contact with propolis could not be avoided completely, he frequently suffered from contact allergy with itchy rashes and ablation of areas of skin. He wrote that a while ago he started to immerse his hands in water with a temperature of about 50 °C, which intensified itching at the beginning but gave relief after a few minutes. He reported that he repeated this five to six times if necessary. Most importantly he wrote that the itching was gone after the procedure and that all skin affections did not occur. He was also able to stop taking corticoid containing creams which he had previously required.

It may be hypothesised that protease-activated receptor-2 plays an important role in contact allergies as it does in atopic dermatitis which can be inhibited/inactivated by heat.[4–8] Consequently, there is less histamine liberation and a lesser contact allergic reaction.

I believe that the concept of heat therapy should be tested since there is currently no effective treatment for propolis contact allergy or other contact allergies.

Conflict of interest

The author has no conflict of interest to declare.

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