



CONTACT DERMATITIS AND OCCUPATIONAL DERMATOSES

CONTACT URTICARIA TO ULTRASOUND GEL: A CASE REPORT

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Background: Contact urticaria (CU) refers to wheal and flare reaction following external contact with a substance, usually appearing within 30 minutes and clearing completely within hours, without residual signs. It can be classified into two groups: immunological and non-immunological. Non-immunological CU (NICU) is the most common form of the disease. Some cases of allergic contact dermatitis to ultrasonic gel have been reported. CU to ultrasound gel is rarer. We herein report a case of CU.

Observation: A 19-year-old girl was first referred to us for the occurrence of two following episodes of acute urticaria about five minutes after applying an ultrasonic gel during ultrasound examinations for recurrent abdominal pain. She experienced the onset of pruritic wheals firstly located at the site of contact with the gel, the abdomen, and subsequently interesting the trunk and the limbs. The eruption spontaneously healed within about 2 hours after removing the gel.

We performed, on the inner aspect of the forearm, an open test with the ultrasonic gel. Five minutes after, the patient developed an itchy erythematous wheal eruption that spontaneously disappeared 1 hour later. Among the components of the gel (polymer, humectant, preservatives, and reverse osmosis water) only the preservatives methylparaben 3.0% pet and propylparaben 3.0% pet were tested by open test with negative results. The ice cube test was negative. In our case a NICU is more likely because the pathogenesis of NICU is due to the release of vasogenic mediators, without prior sensitization and our patient denied any previous exposure to any kind of ultrasound gel.

Key message: CU to ultrasound gel is a rare reaction occurring during ultrasound examination, that is considered as a safe radiological procedure. However, physicians should be aware of this possibility since it may affect further medical management.

