

7. Estlander T, Kanerva L, Jolanki R. Allergic dermatoses in chemical laboratory work. In: Jadassohn Centenary Congress, 9–12 Oct, 1996, London, UK, abstract no. 251: 1996: 64.
8. Foussereau J, Lantz J P, Grosshans E. Allergic eczema from vinyl-4-pyridine. *Contact Dermatitis Newsletter* 1972; 11: 261.
9. Sonnex T S, Rycroft R J G. Allergic contact dermatitis from chloromethyl heterocyclic intermediates in the synthesis of a histamine antagonist. *Contact Dermatitis* 1986; 14: 265–267.
10. Doms-Goossens A, De Boule K, Snauwaert J, Degreef H. Sensitization to 3,4,6-trichloropyridazine. *Contact Dermatitis* 1986; 14: 64–65.
11. Rothe A. Contact dermatitis from N-(α -chlorobenzylidene) phenylhydrazine. *Contact Dermatitis* 1988; 18: 16–19.
12. Sasseville D, Balbul A, Kwong P, Yu K. Contact sensitization to pyridine derivatives. *Contact Dermatitis* 1996; 35: 100–101.
13. Tarvainen K, Kanerva L, Tupasela O, Grenquist-Nordén B, Jolanki R, Estlander T, Keskinen H. Allergy from cellulase and xylanase enzymes. *Clin Exp All* 1991; 21: 609–615.
14. Kanerva L, Estlander T, Alanko K, Jolanki R. Occupational airborne allergic contact dermatitis from dibutylthiourea. *Contact Dermatitis* 1998; 38: 347–348.
15. Estlander T, Keskinen H, Jolanki R, Kanerva L. Occupational dermatitis from exposure to polyurethane chemicals. *Contact Dermatitis* 1992; 27: 161–165.
16. Estlander T, Jolanki R, Kanerva L. Hydroxylammonium chloride as sensitizer in a water laboratory. *Contact Dermatitis* 1997; 36: 161–162.
17. Kanerva L, Alanko K, Jolanki R, Aalto-Korte K, Estlander T. Occupational allergic contact dermatitis of a laboratory assistant from potassium persulfate. *Contact Dermatitis* 1999; 40: in press.
18. Estlander T, Jolanki R, Kanerva L. Occupational dermatitis from 2,3-epoxypropyl trimethyl ammonium chloride. *Contact Dermatitis* 1986; 14: 49–52.
19. Estlander T, Jolanki R, Kanerva L. Occupational allergic contact dermatitis from 2,3-epoxypropyl trimethyl ammonium chloride (EPTMAC) and Kathon LX in a starch modification factory. *Contact Dermatitis* 1997; 36: 191–194.
20. Kanerva L, Tarvainen K, Estlander T, Jolanki R. Occupational allergic contact dermatitis caused by mercury and benzoyl peroxide. *Eur J Dermatol* 1994; 4: 359–361.

Benign familial chronic pemphigus (Hailey-Hailey) provoked by contact sensitivity in 2 patients

G. PÓNYAI¹, S. KÁRPÁTI¹, É. ABLONCZY¹, E. TEMESVÁRI² AND A. HORVÁTH¹

¹Department of Dermatology and Venerology of the Semmelweis Medical University

²National Institute of Dermato-Venerology, Budapest, Hungary

Key words: contact sensitivity; benign familial chronic pemphigus; Hailey-Hailey; cosmetics; fragrance mix; PPD; MCI/MI. © Munksgaard, 1999.

Benign familial chronic pemphigus (Hailey-Hailey) is a rare hereditary condition characterized by development of blisters at sites of friction and in the intertriginous areas.

Case Reports

Case no. 1

A 47-year-old man had had Hailey-Hailey for 8 years. His son, father and grandmother also had the disease. He observed that some creams caused irritation and induced blister formation when applied. He was tested when he was symptom-free.

On patch testing, PPD and MCI/MI showed erythema and infiltration at D2 and blisters at D3. Biopsy of the bullous reaction elicited by MCI/MI showed a hyperplastic epidermis, with split formation in the stratum spinosum, and in the papillary dermis, a chronic inflammatory reaction. On electron-microscopy, in the stratum spinosum, early acantholysis with partial separation of the keratinocytes and, in some places, intraepidermal lymphocytes were detected. Between the keratinocytes, the desmosomal connection within the stratum spinosum

was opened, with internalization of desmosomes becoming apparent. There was no sign of intraepidermal spongiform vesicle formation.

Case no. 2

Many of a 54-year-old woman's relatives had Hailey-Hailey. Her skin symptoms had started 34 years ago, Hailey-Hailey being verified by histology in 1994. She observed that, particularly after the use of some deodorants and cosmetics, confluent, itchy blisters, then superinfected erosions, developed in the intertriginous areas. When seen in our department, under the breast and in the armpits, 1–2 cm large, extended erosions, erythema, fissures and moderate scaling were noted.

On patch testing, fragrance mix showed infiltration at D1 and a blistering reaction at D3. Biopsy of the positive patch test at D3 showed a hyperplastic epidermis, acantholysis, and perivascular infiltration in the upper dermis.

Discussion

There are few reports of Hailey-Hailey patients having contact allergies (1, 2). Peppiat et al. (1) even suggest that

patch testing should be done only if there are strong clinical indications, because some patients might have severe blistering reactions. There are reports of formaldehyde and MCI/MI (3), cinnamic aldehyde and cinnamic alcohol (4) provoking bullous pemphigoid, and 1–3 dichloropropene (5) and nickel (6) provoking contact pemphigus. In these cases, the bullous skin signs were reproduced by patch test and the diagnosis verified histologically. There are reports of pesticides, chromium sulfate and tincture of benzoin provoking contact pemphigus (7).

In our patients, the morphology, histology and electron-microscopical findings confirmed the K  bner phenomenon (8, 9) r  le of contact sensitivity in precipitating the characteristic skin symptoms.

References

1. Peppiatt T, Keefe M, White J. Hailey-Hailey disease – exacerbation by herpes simplex virus and patch test. *Clinical and Experimental Dermatology* 1992; 17: 210–202.
2. Reitamo S, Remitz A, Lauerma A et al. Contact allergies in patients with familial benign chronic pemphigus (Hailey-Hailey diseases). *J Am Acad Dermatol* 1989; 21: 506–510.
3. Soni B, McAlvany J, Fleischer A. Bullosus pemphigoid mimicking contact dermatitis. *Contact Dermatitis* 1996; 35: 314.
4. Goh C L. Bullosus contact allergy from cinnamon. *Dermatosen* 1983; 36: 186–187.
5. Vozza A, Rucco V, Brenner S et al. Contact pemphigus. *Int J Dermatol* 1996; 35: 199–201.
6. Stransky L. Contact pemphigus vulgaris? *Contact Dermatitis* 1998; 38: 45.
7. Brenner S, Wolf R, Rucco V. Contact pemphigus: a subgroup of induced pemphigus. *Int J Dermatol* 1994; 33: 843–845.
8. Temesv  ri E, Horv  th A, Kr  mer M, Ablonczy   . Kir  ly K. Isomorphic skin reaction with DNCB in SLE and DLE. *Contact Dermatitis* 1979; 5: 85–98.
9. Temesv  ri E, R  pay I, Horv  th A, M  th   I. Mycosis fungoides DNCB isomorph reakci   klinikai jelent  s  ge. *B  rgy  gy Vener Szemle* 1981; 57: 197–203.

Octopus apollyon bite

V. BRAZZELLI, F. BALDINI, G. NOLLI, F. BORGHINI AND G. BORRONI

Department of Dermatology, University of Pavia, Policlinico S. Matteo, IRCCS, Piazzale Golgi 2, 27100 Pavia, Italy

Key words: *Octopus apollyon*; Cephalopoda; marine organisms; bite; serotonin; systemic effects; occupational; diver.    Munksgaard, 1999.

Octopuses (*Octopus* spp.) are mollusks belonging to the class Cephalopoda. They are primarily inhabitants of warmer waters (1) and tend to be solitary, irritable, and pugnacious. They may reach 9 m (29 feet) in length. They protect themselves with a parrot-like chitinous beak on the ventral side of the head (1). While many octopuses are capable of inflicting wounds on humans, only the small Australian blue-ringed octopus, *Octopus maculosus* (*Hapalochlaena maculosa*), inflicts lethal bites (2).

Case Report

A 50-year-old male diver was removing a small octopus from an aquarium on a boat in the Andaman Islands (Indian Ocean), to study and to photograph it. He was bitten while handling it carelessly. A small wound, with profuse bleeding and perilesional tingling, appeared on the dorsum of the right hand, accompanied by instantaneous pain (like a bee sting).

Systemic effects soon followed (hypotension and bradycardia). Immediately, the patient immersed the wound in hot water, because he thought that any hypothetical venom could be inactivated in this way. During the first few hours after being stung, he developed swelling, redness and a burning sensation on the hand, unresponsive to analgesics.

After 30 days, a necrotic erythematous plaque was

still present, with lymphedema on the dorsum of the hand. Treatment with topical corticosteroids and systemic non-steroidal anti-inflammatory drugs led to evident improvement of the lesion after only about 2 months. Photographs taken from a sequence filmed by the patient enabled us to identify the octopus as *Octopus apollyon*, a species which lives in tropical seas.

Discussion

The frequency with which divers encounter octopuses is high. The patient, albeit an expert diver, did not consider this risk, probably because he mistook *Octopus apollyon* for *Octopus vulgaris*. Usually the octopus immobilizes its prey, and while it bites, injects toxic secretions produced by the posterior salivary glands, composed of serotonin, other amines (tyramine, metatyramine, dopamine, octopamine and histamine) and cefalotoxin (2–4). Octopus bite is not in itself a dangerous event (a star-like lacerated and contused wound with swelling borders in association with instantaneous pain) except for the bite of the blue-ringed octopus (*Hapalochlaena maculosa*), whose poison is considered lethal for humans (mortality rates >25%) (5–8).

Many reports describe in detail the glandular secretions of *Octopus vulgaris* (present in many aquaria) and *Hapalochlaena maculosa* (9). In our patient, the salivary gland secretion probably contained amines and sero-