

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-

tonin, responsible for the systemic effects of *Octopus apollyon* bite (10). Treatment of the wound with hot water did not seem to inactivate the octopus salivary gland toxin, judging by the long persistence of cutaneous effects. Generally, heat treatment (hot water) is recommended (11) and has proven effective in the treatment of penetrating injuries caused by venomous barbs or spines (stingray spines, stonefish spines and other fishes armed with venomous spines) (11,12).

References

1. Lane N J. *Kingdom of the octopus: the life history of the Cephalopoda*. New York: Word of Science Edition Pyramid Publication, 1962.
2. Williamson J A. The blue-ringed octopus bite and envenomation syndrome. In: Mandojana R (ed): *Aquatic dermatology*. *Clinics in Dermatology* 1987; 5: 127–133.
3. Sutherland S K. *Australian animal toxins: the creature, their toxins and the care of the poisoned patient*. Melbourne: OUP, 1983: 344–358.
4. Halstead B W. *Poisonous and venomous marine animals of the world*, revised edition. Princeton, N J: Darwin Press, 1978: 232.
5. Williamson J A. *The marine stinger book*, 3rd edition. Brisbane: Queensland State Centre Inc, Surf Life Saving Association of Australia, 1985: 44–46.
6. Ersparmer V, Ghirelli F. The action of enteramine on the heart of mollusks. *J Physiol* 1951; 155: 470.
7. Rosco D. Treatment of venomous and poisonous marine animal injuries. *Int Soc Aquatic Med* 1976, Newsletter: 2: no. 2.
8. Flecker H, Cotton B C. Fatal bite from octopus. *Med J Aust* 1955; 2: 329–332.
9. Lane W R, Sutherland S K. The blue ringed octopus bite: a unique medical emergency. *Med J Aust* 1967; 2: 475.
10. Halstead B W. *Dangerous aquatic animals of the world: a color atlas*. Princeton NY: The Darwin Press Inc, 1992: plates 137–138.
11. Williamson J A. Current challenges in marine envenomation: an overview. *J Wilderness Med* 1992; 3: 422–431.
12. Fenner P J, Williamson J A, Skinner R A. Fatal and non-fatal stingray envenomation. *Med J Aust* 1989; 151: 621–625.

Baboon syndrome from i.v. aminophylline in a patient allergic to ethylenediamine

JERE D. GUIN, PAT FIELDS AND KATHY L. THOMAS

John L. McClellan Veterans Administration Hospital, 4300 West 7th Street, Little Rock, Arkansas 72205, USA

Key words: allergic contact dermatitis; systemic contact dermatitis; baboon syndrome; adverse drug reactions; intravenous aminophylline; ethylenediamine; medicaments; immunological memory. © Munksgaard, 1999.

Systemic contact dermatitis is a delayed hypersensitivity reaction in the skin from a systemic exposure. Its presenting picture includes fixed (1), exanthematous (2) and eczematous (3, 4) drug eruptions, certain cases of estrogen dermatitis (5), rare fixed erythemas and pompholyx secondary to contact hypersensitivity (6), spontaneous flare-ups (sic) and exfoliative dermatitis (7).

Case Report

A 64-year-old man developed a pruritic, erythematous eruption of the perineal area a few hours after a stress test during which he received persantine and i.v. aminophylline. Physical examination revealed a morbilliform erythema of the perineal area under the underclothing anteriorly, with still more prominent erythema posteriorly. The measles-like exanthem lacked epidermal changes of exudation or scaling. A series of 20 standard patch tests were negative, except for a +++ response to ethylenediamine (EDA) at D3. The patient, on questioning, remembered using a topical medicament prescribed for his wife on this area in the distant past. He improved uneventfully with time and avoidance.

Comment

Exanthematous systemic contact dermatitis from ethylenediamine has been reported from theophylline EDA

(as well as from hydroxyzine). Originally described by Andersen et al. (8) in 1984, baboon syndrome is a clinical presentation of systemic contact dermatitis involving the buttocks (and adjacent skin) in a distribution reminiscent of the erythematous buttocks seen in baboons. Areas under the underwear, the inner thighs and axillae may also be affected. Reported causes include ampicillin (9), erythromycin (10), mercury (11, 12), amoxycillin (13), and heparin (13). Most cases are caused by oral agents, suggesting that excretion of the antigen may be a factor, but our patient received the causative medication i.v.. We postulate that the localization may be where he had previously applied a topical medicament that probably contained EDA.

References

1. Guin J D, Haynie L S, Jackson D, Baker G F. Wandering fixed drug eruption: a mucocutaneous reaction to acetaminophen. *J Am Acad Dermatol* 1987; 17: 399–402.
2. Berman, B A, Ross R N. Ethylenediamine: systemic eczematous contact type dermatitis. *Cutis* 1983; 31: 594, 596, 598.
3. Menné T, Weismann, K. Hamatogenes Kontaktekzem nach oraler Gabe von Neomycin. *Hautarzt* 1984; 35: 319–320.
4. Fisher A A. Systemic contact dermatitis from Orinase and Diabinese in diabetics with para-amino hypersensitivity. *Cutis* 1982; 29: 551, 556, 565.
5. Shelley W B, Shelley E D, Talanin N Y, Santoso Pham J.