

Penile Marine Dermatitis Due to Contact With Cnidarian

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A 5-year-old previously healthy male child was brought to the paediatric emergency department two hours after sting/contact with a marine animal (most likely a jellyfish) while playing on the beach without a swimsuit. Upon admission, he was complaining of pain, apyretic, haemodynamically stable, with exuberant oedema and an erythematous-violaceous area with bullous lesions with serous fluid on the body of the penis (Figs. 1 and 2). No oliguria was present. No laboratory abnormalities were found.

After hospitalisation, he underwent therapy with analgesics, oil-in-water emulsion with topical triethanolamine and hydrocortisone and clemastine, with progressive improvement. On the second day, there was a spontaneous rupture of phlyctaenae and, as a superinfection was presumed, he was started on amoxicillin and clavulanic acid. The patient was discharged on the third day with symptomatic therapy.

The *Cnidaria* phylum is a group of aquatic animals that include medusas, jellyfish and men-of-war.¹ This phylum displays a heterogeneous worldwide distribution. The sting by a cnidarian has been a growing concern, particularly in the summer season, and there seems to be an increase in the number of these organisms related to climate change.² In Portugal, the most frequent species are the Portuguese men-of-war (*Physalia physalis*, with 40% of sightings), *Catostylus tagi*, *Chrysaora hysoscella* and *Pelagia noctiluca* with interregional variations.³ The majority are harmless, only causing skin reactions (erythema and oedema or delayed hypersensitivity reaction in the following weeks). Some species may cause major systemic reactions such as an anaphylactic shock.^{1,2} It is important to recognise the existing species in the region and to raise awareness among professionals and the general population.⁴

There seems to be consensus on the use of analgesics, saline water and hot water at 42 °C-45 °C for symptomatic relief and inhibition of cnidocytes.² In case of a sting by a Portuguese man-of-war, the application of 4%-6% acetic acid has proved to be effective. In the sting caused by any species, visible tentacles should be

removed.^{2,4} The use of immersion in cold fresh water, urine or chemicals and friction of the lesions are not recommended.^{4,5}

Keywords: Bites and Stings/therapy; Child, Preschool; Cnidaria/pathogenicity; Cnidarian Venoms/adverse effects; Penile Diseases/diagnosis



Figure 1. Injury of the penis five hours after the sting by a cnidarian, with exuberant oedema and erythema.



Figure 2. Injury of the penis ten hours after the sting by a cnidarian.

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WHAT THIS REPORT ADDS

- Health care professionals should recognise the main sea species in the region and be aware, especially if working in bathing areas
- The majority of these sea species are harmless, but some species may provoke life-threatening reactions with anaphylactic shock.
- There is a consensus on the use of analgesics, saline water and hot water at 42 °C-45 °C (for pain relief).

Conflicts of Interest

The authors declare that there were no conflicts of interest in conducting this work.

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Protection of human and animal subjects

The authors declare that the procedures followed were in accordance with the regulations of the relevant clinical research ethics committee and with those of the Code of Ethics of the World Medical Association (Declaration of Helsinki).

Confidentiality of data

The authors declare that they have followed the protocols of their work centre on the publication of patient data.

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