Seabather's eruption: report of case in northeast region of Brazil *

Prurido do traje do banho: relato de caso na região nordeste do Brasil

André Luiz Rossetto¹

Luís Antônio de Oliveira Proença²

Abstract: Seabather's eruption is characterized by the occurrence of intensely itchy erythematous papules observed mainly in the region covered by swimwear. The dermatitis occurs due to the contact of planula larvae of scyphomedusan Linuche unguiculata with the skin. The swimsuit pressure triggers the action of the poisonous stinging structures carried by the larvae. The case described occurred in a child who, while bathing in the ocean waters of the Northeast coast of Bessa’s Beach located in the city of João Pessoa, state of Paraíba, showed typical clinical signs of the disease. It was concluded that the report of the case showed clinical and therapeutic implications for doctors working in all of the Brazilian coastal areas.

Keywords: Brazil; Cnidaria; Cnidarian venoms; Dermatitis

INTRODUCTION

Seabather’s eruption (SBE) is clinically characterized by intensely itchy erythematous papules observed mainly in the region covered by swimwear, while bathing or soon after exposure to seawater.¹ ⁴ The planula larvae of scyphomedusan Linuche unguiculata (Figure 1). The planula larvae measure approximately 0.5mm and the contact with the skin of the bather activates the nematocyst discharge from cnidocytes, the defensive stinging cells, causing dermatitis.¹ ⁴ The planula larvae penetrate the area covered by swimwear, are trapped by the material it is made of and discharge the cnidocytes mainly when the bather comes out of the ocean.¹ ⁴ Swimwear acts as a filter, draining water and keeping the planulae against the skin. It may also be triggered by contact with fresh water or pressure.¹ ⁴ This small jellyfish, with a diameter of approximately 1.5cm is frequently found in the marine waters of the Caribbean, Gulf of Mexico, Florida, Cuba and Bahamas where many cases are reported and may even reach epidemic proportions.¹ ⁴ L. unguiculata was identified in the Brazilian coast in 1998 by Silveira and Morandini, in the São Sebastião Channel, state of São Paulo (SP).¹ ⁷ Some time later Morandini et al. identified it in the South Region, on the island where the Arvoredo Biological...
Marine Reserve is located, in Florianópolis, state of Santa Catarina (SC); in the Southeast Region, on Ilha Grande, in Rio de Janeiro and in the Northeast Region, in the state of Ceará.⁸⁻⁹

In 2001 Haddad Jr et al. published the first Brazilian cases of SBE on the beach of Ubatuba, near São Sebastião Channel.² Rossetto et al. (2007) reported six cases of the disease in the South Region, detected on beaches of Camboriú and Mariscal, located on the state of Santa Catarina coast and 45km and 15km away from the Arvoredo Biological Marine Reserve, respectively.³ According to Rossetto et al. (2009) the number of cases continues to expand, with thirty-eight cases observed involving six (42.8%) of the fourteen municipalities in that seaside area.³

The typical clinical picture is characterized by a papulous, erythematous and pruriginous eruption that appears at the time of or soon after sea bathing, especially in the areas covered by swimwear, with progressive escalation of itching intensity.¹⁻² It usually affects children, suggesting longer time of exposure during sea bathing than adults.³⁻⁴

Diagnosis is both clinical and epidemiological.¹⁻⁴ The main differential diagnoses are Swimmer’s itch, that has its onset after fresh water bathing, strophulus and scabies.¹⁻⁴

The use of topical vinegar has the effect of irreversibly deactivating L. unguiculata nematocysts, avoiding future discharges, but without effect on already released toxins.⁶ The illness responds well to treatment with systemic antihistamine and topical corticosteroids and may evolve to spontaneous resolution in one or two weeks.¹⁻⁶

The authors report a SBE case in a child, following sea bathing at the Bessa beach, located in the city of João Pessoa, state of Paraíba (PB), with the objective of highlighting and demonstrating the incidence of the disease in the Northeast Region of Brazil.

CASE REPORT

An 11-year old boy, resident of the city of Itajaí, state of Santa Catarina, presented with pruriginous lesions on the gluteal region for 12 days. The onset was immediately after sea bathing in the Northeast Region of Brazil, at the Bessa beach, in João Pessoa, PB, during the school vacation of January/2011. Itching and lesions were intensified at night and progressed to formation of some pustules. The patient continued to bathe on the same beach, with his father and brother, who were not affected. His parent took pictures of the lesions and when they returned to Itajaí they took the boy to the dermatology department to document the case (Figure 2). The physical examination detected erythematous papules with some pustules located on the gluteal region and limited to places covered by the swimming trunks. Loratadine orally 10ml/day and topical hydrocortisone were prescribed. He traveled again, did not use the medication and presented spontaneous recurrence of lesions in seven days.

DISCUSSION

In the present case the onset of erythematous papules was typical of the disease and due to the intense itching, some of them progressed to pustules. According to Rossetto et al. in an affected surfer the papules evolved to acneiform type lesions.⁴ The pla-
nula larvae can penetrate most swimwear materials, including neoprene, worn by most surfers.

SBE diagnosis is both clinical and epidemiological, laboratory tests are not necessary. The histopathological exam, although not characteristic, may corroborate for the diagnostic clarification of the illness on atypical locations, resistant to treatment and in surfers who have had several episodes due to prolonged reexposure to sea water.

ELISA technique allows the demonstration of specific reactivity with *L. unguiculata* IgG-class antibodies in the serum of the patients, but it is not available in our midst. Rossetto *et al.* stocked serum of most (60.5%) of the thirty-eight affected patients for future serology tests. In the reported case serum was not collected for laboratory tests.

According to Haddad *et al.* the incidence of this dermatitis in Brazil is probably underestimated, since many do not seek medical attention. This is possibly due to the fact that the disease, in some patients, such as in the reported case, progresses to spontaneous resolution and is frequently unknown to part of the population and health professionals.

It was concluded that, one decade after the first SBE report in the country, five years since the identification of *L. unguiculata* in the Northeast, it seems clear that this dermatitis is not restricted to the Southeast and South Regions of Brazil. Its presence in the Northeast coast is evidence that the disease occurs, with clinical and therapeutic implications for physicians that work in seaside areas of all the country.

ACKNOWLEDGMENTS:
To Professor Fabio Lang da Silveira, Department of Zoology, Institute of Biosciences, Universyte of São Paulo/USP, state São Paulo (SP) for allowing the use of macrophotograph of *Linuche unguiculata*.

REFERENCES

MAILING ADDRESS:
André Luiz Rossetto
Av. Alvin Bauer, 655 Sala 203 - Centro Médico Vida 88330-643 Balneário Camboriú, SC Phone: (47) 3367 3407 E-mail: rossettovida@terra.com.br

How to cite this article: Rossetto AL, Proença LAO. Seabather’s eruption: report of case in northeast region of Brazil. An Bras Dermatol. 2012;87(3):472-4.