

# CASES AND RESEARCH LETTERS

## Jellyfish Sting or Tattoo?\*

#### Medusa, ¿picadura o tatuaje?

To the Editor:

Jellyfish are marine invertebrates. They are divided into 4 groups: Hydrozoa (e.g., the Portuguese man-of-war), Scyphozoa (true jellyfish), Cubozoa (e.g., *Chironex fleckeri* or the sea wasp, considered the most toxic), and Anthozoa (sea anemones and corals).<sup>1</sup> Jellyfish are the main cause of marine envenomation. Their tentacles have stinging cells, or nematocysts, which they use to capture prey and to defend themselves. These cells contain a capsule with a thread that injects the venom on contact with the prey. The toxicity of the jellyfish sting varies according to the species: most jellyfish stings cause a painful burning sensation but the symptoms are usually short-lasting. However, bathers are advised to leave the water immediately because of the risk of anaphylactic shock and drowning.

We report the case of a 46-year-old woman with no relevant personal history who presented with a skin lesion on the right leg that had appeared 24 hours earlier after bathing in the sea. The patient stated that the symptoms had begun as a sharp burning pain and within minutes the signs of inflammation had appeared. She came to the clinic because the symptoms were progressively worsening.

Physical examination revealed confluent erythematous papules in the shape of a jellyfish and a slight inflammation of the surrounding and underlying tissue (Fig. 1). The rest of the physical examination was normal. With an initial diagnosis of uncomplicated jellyfish sting, moderately potent corticosteroid cream and oral antihistamines were prescribed. However, the inflammation continued to progress until it caused secondary cellulitis covering almost the entire leg, making it necessary to prescribe systemic antibiotics and anti-inflammatory drugs. After 15 days the inflammation had resolved, leaving a slight residual hyperpigmentation that disappeared spontaneously over the following months.

Reactions that occur after jellyfish envenomation are divided into 3 groups: immediate allergic reactions, immediate toxic reactions, and delayed allergic reactions.<sup>2</sup> Death from stinging occurs through a hypersensitivity mechanism or through the effect of several toxins on the cardiovascular or respiratory systems or on the liver.<sup>3</sup>

Immediate local reactions are characterized by burning and itching of varying intensity according to the species of jellyfish that caused the sting. Involvement of surrounding soft tissue is common. The disease frequently presents as whiplash-like erythematous papules and papulovesicular lesions.

Vascular reactions (ischemia from vasospasm and thrombophlebitis of the underlying vessels) and regional lymph node reactions (inflammation of locoregional lymph nodes) have also been reported.

Other less commonly reported reactions include angioedema, recurrent reactions, contact dermatitis, and papular urticaria.

Delayed and persistent reactions, though little known, are not uncommon.  $^{\rm 4,5}$ 

Medical treatment depends on the type of reaction. Patients with uncomplicated skin reactions are treated symptomatically with topical corticosteroids and oral antihistamines and show a good response in a few days.

The most important advice for the first-aid management of jellyfish envenomation is to take measures to avoid release of the venom toxins: to wash the area with sea water rather than fresh water, to apply ice in packs rather than directly, to avoid rubbing the affected area, and to avoid applying urine or alcoholic drinks, which can change the pH and activate the nematocysts. Depending on the species



Figure 1 Inflammatory plaque on the leg in the shape of the jellyfish that caused the sting.

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of jellyfish that causes the sting, it can be useful to apply vinegar, a 1:1 aqueous solution of sodium bicarbonate, or a saturated solution of magnesium sulfate in a solution of sodium chloride.

Jellyfish sting reactions are very common on the Spanish coast in summer. Therefore, although these reactions tend to be local and short-lasting, we consider it important to know how to deal with them and to be aware of the less common reactions in order to diagnose them correctly and provide early treatment.

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C. Abellaneda,\* R. Navarra, M.T. Martín-Urda, M. Gómez

Servicio de Dermatología, Hospital Municipal de Badalona, Barcelona, Spain

\* Corresponding author. *E-mail address*: cabellaneda@comb.cat (C. Abellaneda). doi:10.1016/j.adengl.2012.04.013

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## Síndrome multiorgánico autoinmune paraneoplásico asociado a linfoma folicular

To the Editor:

### Introduction

Paraneoplastic pemphigus is a rare entity first described by Anhalt et al. in 1990.<sup>1</sup> It is an autoimmune disease of the skin and mucosa, associated with neoplasm, which is generally lymphoid in origin. Because several organs are involved as well as the skin and because the physiopathologic mechanisms associated with the mucosal, skin and internal-organ lesions are not limited to the presence of antibodies specific to adhesion molecules, in 2001, Nguyen et al.<sup>2</sup> proposed the term paraneoplastic autoimmune multiorgan syndrome (PAMS).

We describe a patient with PAMS associated with non-Hodgkin lymphoma.

### **Case Description**

A 69-year-old man with a personal history of cerebrovascular accident and type 2 diabetes mellitus visited our department with oral erosions and ulcers that had appeared 6 months earlier.

Physical examination revealed erosive glossitis, cheilitis, pseudomembranous conjunctivitis, and ulcerative keratitis.

The patient also presented erythematous scaly lesions on the scalp, maculopapular lesions and reddish-purple plaques on the torso and legs, hyperkeratosis with fissures on the palms and soles, and erosive lesions on the glans and scrotum (Figs. 1 and 2); all these signs appeared 2 months before the patient visited our department.

A skin biopsy showed lichenoid interface dermatitis with necrotic keratinocytes (Fig. 3). Direct immunofluorescence showed intercellular deposits of immunoglobulin (Ig) G and IgC3 in the epidermis. Indirect immunofluorescence showed intercellular deposits when monkey esophagus was used as a substrate and was negative when rat bladder was used. Immunoblotting identified envoplakin (210 kDa) and periplakin (190 kDa) antibodies.

A study was performed to search for an occult neoplasm. Computed tomography of the chest and abdomen revealed



Figure 1 Reddish-purple maculopapular lesions grouped in plaques on the back.

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