Delayed Skin Reaction Caused by a Coelenterate

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Key Words

Marine animals
Coelenterates
Delayed skin reaction

Abstract

We report a delayed skin reaction, histologically characterized by liquefaction degeneration of the basal layer, which was observed in a 30-year-old man returning from Guadeloupe. It was most likely due to contact with a marine animal.

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Immediate sting reactions are the most frequently observed skin damage caused by marine animals [1]. Delayed, persistent reactions are less well known [2]. We report a case which belongs to this latter group.

Case Report

A 30-year-old healthy man was superficially 'injured' while swimming in the coastal sea of Guadeloupe. He observed a superficial scratch on the right wrist and thigh. The next day the superficial erosion began to swell, vesicles and crusts began to appear. During the next few days a linear extension of the lesion of the right wrist going all along the forearm to the elbow was seen. Other lesions appeared on the dorsal aspect of the left index and medius. They caused moderate burning itch.

A week after injury, physical examination revealed the presence of crusty, erythematous, violaceous skin lesions in all the affected areas (fig. 1). The regional lymph nodes were not enlarged. White and red blood cell counts, and sedimentation rate were normal. Microbiological examination of a skin scraping was negative. A biopsy was taken from the lesion of the right thigh. Histologically the epidermis was partially parakeratotic; there was pronounced vacuolization of the cytoplasm of basal keratinocytes leading to liquefaction degeneration of the basal layer (fig. 2). Isolated necrotic keratinocytes were also seen in the suprabasal layers of the epidermis. The upper dermis showed a mild, perivascular, lymphohistiocytic infiltrate with some melanophages. New skin lesions appeared during the first 2 weeks following injury; then they gradually regressed. 4 months later the patient had still some residual hyperpigmentation. Topical corticosteroids gave some symptomatic relief.

Comment

The skin lesions of this patient are most likely related to a contact with a marine animal of the phylum Coelenterata, probably with a 'fire coral' or a 'Portuguese man-of-war'. The coelenterates are characterized by toxin-releasing organelles, nematocysts, which are located on the tentacles. There are three classes of coelenterates. The hydrozoa have a gas-filled bag, long

tentacles and are propelled by wind and waves. The two hydrozoa most frequently causing skin lesions are the 'Portuguese man-of-war' and the 'fire coral'. The scyphozoa have a hood capable of rhythmic contractions, which can propel the animal.

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Fig. 1. Linear, erythematous violaceous, partially crusted skin lesions on the right forearm.

Fig. 2. Histology of a lesion from the right thigh: pronounced vacuolization and degeneration of basal keratinocytes. HE. $\times 700$.

The third class, the anthozoa (true corals) are rarely hazardous for man.

The skin lesions observed in our patient are compatible with those reported in the literature to be caused by coelenterates, most likely the 'Portuguese man-of-war' or 'fire coral' [2]. A salient feature was the marked liquefaction degeneration of the basal layer of the epidermis.

References

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Tufted Angioma

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Key Words. Tufted angioma ■ Progressive capillary hemangioma · Nakagawa's angioblastoma

Abstract. The clinical and histological description of 2 cases of tufted angioma is presented.

Acquired tufted angioma is a benign, slowly growing angioma of the skin mainly occurring in children and young adults of both sexes [1]. Synonyms are progressive capillary hemangioma

and Nakagawa's angioblastoma. Its differential diagnosis with Kaposi's angiosarcoma is of paramount importance.

Case Reports

Case 1

A 37-year-old woman had noticed, during the last 6 months, the progressive appearance of several vascular nodules on the slightly swollen left submandibular region of the neck. The swelling of the left neck had been present since childhood. At birth, she said having had 3 small angiomas of the chin, which were irradiated by 3 sessions of radiotherapy at the age of 1 year (dose unknown). Her personal and family history is uneventful. She is working as a nurse in an intensive care unit; she does not belong to a risk group for AIDS.

Physical examination revealed a slightly infiltrated skin extending from the chin along the lower left jaw to the adjacent neck. Multiple reddish papules of irregular outline, measuring a few millimeters were scattered over this area (fig.1). The remainder of the physical examination was unremarkable. HIV serology was negative. On a few lesions dye-laser treatment was attempted and gave a satisfactory result; follow-up is less than 1 year.

Case 2

A 25-year-old woman with an uneventful personal and family history observed the occurrence of a few violaceous papules on the upper part of her back at the age of 20 years. During her first pregnancy she observed an increase in size and number of these skin lesions.

Physical examination was unremarkable except for the skin lesions. They appeared as reddish violaceous papules of a few millimeters in diameter (fig. 2).

Histology

H. Histology of biopsies from the 2 patients showed very similar alterations. In the dermis there were scattered vascular lobules of varying sizes (fig.3). The epidermis and the surrounding dermis were unremarkable. The vascular tufts were composed of closely packed endo-thelial cells with round to ovoid nuclei and scanty cytoplasm. The small capillary lumina lobules, occasionally also within them. Many of the tumor cells were surrounded by a reticular sheath. There was no cell atypia. c. containing exceptionally a few erythrocytes