Psoriasis Following Contact with Rubber Gloves in a Patient Sensitized to Rubber Additives

Psoriasis tras contacto con guantes de goma en un paciente sensibilizado a los aditivos de las gomas

To the Editor:

Psoriasis is a chronic inflammatory disease that can be triggered or exacerbated by numerous factors such as trauma, infections, and drugs. Other exacerbating factors are irritant contact dermatitis or, more rarely, allergic contact dermatitis (ACD).¹⁻⁵ We present a case of psoriasis caused by ACD due to rubber additives.

The patient was a 28-year-old man with no personal or family history of skin disease who, 1 year earlier, had developed pruritic lesions on the hands (Figure 1) and subsequently on the scalp, the face, the trunk, the knees, and the elbows. Physical examination revealed erythematous, scaly, moderately infiltrated plaques with well-defined borders. The patient had been working in maintenance and cleaning for 3 years and had to handle a range of cleaning products and wet his hands frequently. He wore protective leather and rubber gloves. Treatment with a range of topical corticosteroids had resulted in poor response, but the patient's condition improved significantly when he was on sick leave or holidays.

Biopsy of a plaque from the back of the hand showed characteristic features of psoriasis. An initial diagnosis of psoriasis with Koebner phenomenon on the hands secondary to irritant contact dermatitis was made and the patient was prescribed ciclosporin A (5 mg/kg) in view of the poor response to topical corticosteroids. After a marked initial improvement, there was a deterioration in the disease and the medication was withdrawn. Patch tests were performed according to the guidelines of the Spanish Contact Dermatitis Research Group (abbreviated in Spanish to GEIDAC) using the standard GEIDAC series and a rubber series (Chemotechnique, Malmö, Sweden). Readings at 48 and 96 hours were positive (++) for the carba mix, the thiuram mix, the black rubber mix, tetramethylthiuram monosulfide, tetramethylthiuram disulfide, N-cyclohexyl-N-phenyl-4-phenylenediamine, and N-isopropyl-N-phenyl-

N-phenyl-4-phenylenediamine, and N-isopropyl-N-phenyl-4-phenylenediamine (Figure 2). The patch test reactions were clearly eczematous and were not biopsied. A skin prick test for latex was negative. The lesions disappeared almost completely when the patient was assigned to another work station and started to wear vinyl gloves; just a few small plaques persisted on the elbows and back of the hands.

There have been reports of psoriasis exacerbation on the hands attributed to a Koebner phenomenon (a relatively common and well-known response) following irritant contact dermatitis.¹ Psoriasis flare-ups following ACD are much rarer but have also been attributed to a Koebner response in patients with existing psoriasis.²⁻⁵

Hyperkeratotic eczema is a well-known manifestation of ACD to different rubber additives and black rubber mix (antioxidant amines).⁶ In our case, however, considering the histology and clinical findings (psoriasiform plaques on the back of the hands) and the presence of generalized lesions, we believe that our patient had psoriasis.

The prevalence of skin sensitization in patients with psoriasis is a matter of debate. While several authors have reported higher prevalence in these patients compared to the general population,⁷ others have reported similar or even lower levels.^{8,9} In the case reported here, the patient's reaction to the rubber additive patch tests was clearly relevant considering that he wore rubber gloves at work and showed marked improvement when he stopped using these gloves.

Although there have been reports of psoriasis flare-ups following ACD due to rubber additives, the case we describe



Figure 1 Erythematous, scaly plaques with well-defined borders on the back of the hand.

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Black rubber mix		
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Figure 2 Positive patch test results to rubber additives.

differs in that the patient had no personal or family history of psoriasis and developed lesions in areas other than the site of primary contact. We are unable to explain this. The persistence of a small number of lesions, despite avoidance of contact with rubber additives, would seem to indicate psoriasis triggered by a Koebner phenomenon in an individual with a genetic predisposition. Another possibility is that the psoriasis was triggered by ACD at different sites following contact with the rubber in the gloves (as occurs with ectopic ACD). Finally, considering that we know of no similar cases, the psoriasis might have been induced or triggered by ACD, as occurs with other stimuli such as certain drugs.

We have described a rare clinical case but we would also like to highlight the fact that noneczematous dermatitis might be caused or exacerbated by contact allergy and recommend the performance of patch tests in all cases in which there is a suggestive clinical history.

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Mucoepidermoid Carcinoma of the Lip

Carcinoma mucoepidermoide de labio

To the Editor:

Tumors of the lip, except for squamous cell carcinoma, are rare, and tumors of the minor salivary glands account for less than 2% of all lip tumors.¹ These form a very heterogeneous group of neoplasms; most of them are benign (55%-65%, depending on the series)^{2.3} although the benign or malignant nature of the tumors appears to vary according to the anatomic site.³ Tumors of the minor salivary glands that arise on the palate and in the upper lip tend to be benign, whereas those that develop in the lower lip tend to be malignant.² The most common of the malignant tumors are adenoid cystic carcinoma and mucoepidermoid carcinoma.¹

Tumors of the minor salivary glands occur predominantly in women (female to male ratio of 1.6 to $1)^2$ in the fourth to fifth decades of life. The tumors are characterized by endophytic growth and often present a slowly progressive course, which delays the diagnosis.

We describe a 42-year-old woman with no relevant past history who consulted for a painless mass with a diameter of 1 cm on the internal aspect of the lower lip. The mass had first appeared 3 years earlier. The lesion was round, of elastic consistency, and covered by a mucosa of normal appearance. Its growth had been slowly progressive. There were no palpable locoregional lymph nodes. V-excision was performed. Histology revealed a well-delimited submucosal mass that pushed up the mucosa and showed infiltration at the lateral and deep margins. The mass was composed of cords and islets of mucus-secreting, epidermoid, and intermediate cells with variable degrees of differentiation (Figures 1 and 2). Low-grade mucoepidermoid carcinoma was diagnosed.

Mucoepidermoid carcinoma of the oral cavity arises in the ductal epithelium of the major or minor salivary glands. Affected minor glands are most frequently located in the palate, followed by the lower lip.³ There have been occasional reports of cases of primary cutaneous mucoepidermoid carcinomas considered to originate in sweat glands and also in the vermillion border of the lower lip, where there are no salivary glands.⁴ In the latter case, the authors suggested that it was due to metaplasia in a squamous cell carcinoma of the lip and excluded glandular origin. Mucoepidermoid carcinoma is composed of various cell types: mucus-secreting cells that can present variable morphology and that are identified using mucin stains, squamous cells with no evident keratinization, clear cells that contain glycogen and occasionally mucin, and intermediate cells that have the characteristics of basal cells and polygonal squamous cells in terms of size and appearance. The proportion of each cell type and their arrangement within the tumor can be highly variable.5 Histologic parameters, such as the cystic component, the