

LETTERS TO THE EDITOR

Use of Transparencies to Read Patch Tests

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To the Editor:

Patch tests are required for the adequate diagnosis and management of allergic contact dermatitis. These are perfectly standardized tests where patches are applied to the skin of a patient for 48 hours, with an initial reading immediately following their removal and a second reading 48 or 72 hours after the first. A delayed reading is recommended for certain allergens, varying between 72 hours and 5 days after removal of the patches. When the patches are removed, it is normal practice for marks to be made on the back of the patient with a marker pen in order to identify any positive results from the first reading. In order to prevent these marks being erased, the patient must reduce sweating as far as possible and avoid wetting the area where the patch was applied. Any recommendation that the patient redraw the marks themselves may ruin the results of the test.

Our group has adopted the use of methacrylate sheets placed over the patch test area, as proposal by Le Coz et al.² Routine use of this method has contributed to a great improvement in the well-being of our patients.

The technique consists of tracing the location of patch tests on the back of patients onto a methacrylate transparency (Figure 1). We use as many A4 methacrylate transparencies as are necessary to cover all the patches, and a marker pen to write on these. Immediately after the patches are removed, transparencies are applied to the skin surface. These are marked with appropriate reference points, the location of allergen patch sites, and any immediate positive reactions at the first reading (Figure 2). The transparencies are filed under the name of the patient, and this is repositioned at the second reading—using the marked reference points—in order to determine the appearance of new positive reactions.

The patient must have clear points of reference on their back in order for the transparency to be correctly repositioned later. These points must be stable skin lesions (naevi, freckles, angiomas, tattoos, etc) and, although marking 2 points would be geometrically sufficient, we prefer to use at least 3 reference points, as widely spaced as possible. This technique can only be used effectively where there is good coordination between staff removing the tests and marking the transparencies, and the doctor making the readings. When necessary, we use several sheets per patient, preferring to overlap the transparencies rather than joining sheets together to cover the back of the patient. The location of the patches must be drawn with the patient standing totally upright with a relaxed back. The patient should remove all upper body clothing and underwear, and they should be asked to unfasten their belt if the lower back area is involved. If the reference lesions are large, the outline of these can be traced in order to position the transparency better.

The main advantage of this technique is that the patient can continue with normal life, washing their back and returning to work the day the patches are removed. Meanwhile, the transparencies can be filed for later readings. These may also be recycled—the marks can be removed with acetone—and we avoid any potential exceptional allergic skin reactions to the ink from the marker pen.³

We describe a method that is easy to apply, comfortable for the patient and durable, that could also be applied in cases of contact eczema.

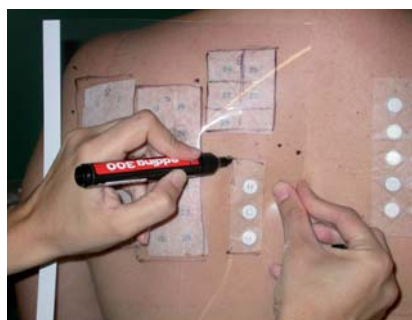


Figure 1. Tracing patch tests from the back of the patient onto the transparency with a marker pen. Note the reference points.



Figure 2. Repositioning the transparency on the back of the patient 48 hours later through use of the reference points. Note the positive result marked for the final reading.

Acknowledgments

To Milagros Cabrera García and Milagrosa López Benítez, nurses in the Servicio de Dermatología del Hospital Universitario Insular de Gran Canaria, Spain, for their invaluable help in establishing this technique within our Service. It would not have been possible without them.

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The Legacy of José Eugenio Olavide in the United States

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To the Editor:

After doing extensive research on Alibert and the Hôpital Saint Louis in Paris, I thought I knew a great deal of the history of French dermatology, but the neighboring tradition of Spanish dermatology, so much influenced by it, was completely unknown to me.

When I typed the words "Spanish dermatology" and "father of Spanish dermatology" into a variety of Internet search engines, José Eugenio Olavide and the Olavide Museum came up. I was intrigued, and contacted Drs. Conde-Salazar and Heras to request more information about Spanish dermatology in the late 19th and early 20th centuries. I also made 2 trips to Spain to collect information and to see the wax figures Olavide had commissioned.

Don José Eugenio Olavide is known as the father of dermatology in Spain. He was born in Madrid on September 6, 1836, and died on March 2, 1901. He graduated with a degree in medicine and surgery in June 1859. After completing his studies, he went to Paris to work with 2 surgeons, Velpeau and Maisonneuve, and also attended the grand rounds presentations of the famous dermatologists of the time at the Hôpital Saint-Louis, among them Bazin and Hardy. After spending 2 years in Paris, he returned to Madrid in 1861 to take up a position as a staff physician in the Hospital San Juan de Dios in Madrid.¹⁻⁶

There he introduced numerous innovations. One of the most interesting of these occurred in 1864, when he and his colleagues established grand rounds presentations.¹ Between 1871 and 1881, Olavide published his most important work, *Dermatología general y atlas de la clínica iconográfica de enfermedades de la piel o dermatosis (General Dermatology and Atlas of Clinical Illustrations of Skin*

Diseases or Dermatoses). The atlas contained 168 large plates complete with explanations, and the list of illustrations contained 9 figures. This work was comparable to that of Alibert in France (1806). Until 1896 he continued to publish other works including books, manuals, and numerous medical articles. Olavide was the driving force behind the creation of

Table 1. World Cat and Index Cat book search

<i>Olavide as first author</i>	Dermatología general y clínica iconográfica de enfermedades de la piel o dermatosis ^a (General Dermatology and Atlas of Clinical Illustrations of Skin Diseases or Dermatoses). 1871 (2 volumes: the book and illustrated atlas) (E)
	De la sarna y su tratamiento (On Scabies and Its Treatment). 1874 (E)
	Aforismos de dermatología práctica ^b (Aphorisms of Practical Dermatology). 1880 (E)
	Lecciones sobre las dermatosis herpéticas (Lectures on Herpetic Dermatoses). 1881 (E)
	De las enfermedades cutáneas producidas por vegetales parásitos (Skin Diseases Caused by Fungal Parasites). 1878 (NE)
	Leçons professées à l'Hôpital de St. Jean-de-Dieu de Madrid. Du rhumatisme et des dermatoses rhumatismales (Lectures delivered at the Hospital San Juan de Dios, Madrid. On Rheumatism and Rheumatic Dermatoses). 1888 (NE)
<i>Prologue by Olavide</i>	Lecciones clínicas sobre las enfermedades de la piel, dadas en el Hospital de San Luis, de Paris (Clinical Lectures on Skin Diseases Delivered in the Hôpital St. Louis, Paris). 1878 (by Eugène Guibout) (E)
<i>Olavide as subject of book</i>	Un maestro de la dermatología española, José Eugenio Olavide (José Eugenio Olavide: A Leading Figure in Spanish Dermatology). 1996 (by Joaquín Calap)

^aThere is a second copy at the University of Oxford, Oxford, United Kingdom

^bThere is a second copy at the Countway Library, Harvard Medical School, Boston, Massachusetts, USA.; (E) books of which there is also a copy in the National Library of Medicine (NLM) in Bethesda, Maryland, USA.; (NE) books of which there are no other copies.

Table 2. Articles by Olavide in Index Cat

Cómo deben prevenirse las hemorragias en los actos quirúrgicos (The Prevention of Blood Loss During Surgical Procedures). 1875
Del hipnotismo (On Hypnotism). 1860
Herpetismo y enfermedades que deben considerarse como de naturaleza herpética (Herpes and Diseases That Should Be Considered of a Herpetic Nature). 1870
El parasitismo o morbidismo vegetal ante la razón y ante los hechos (Parasitic or Fungal Diseases: Causes and Facts). 1872, 1875
Sinopsis de un curso de dermatología especial o estudio analítico de las afecciones cutáneas (Synopsis of a Course in Specialized Dermatology, or the Analytic Study of Skin Disorders). 1879-80

Table 3. Articles by Olavide in Index Medicus

Aforismos de dermatología práctica (Aphorisms of Practical Dermatology). 1879 ªPensieri sull' infermita della pelle o aforismi di dermatologia practica 1879 (Italian translation)
Afecciones cutáneas de naturaleza herpética (Herpetic Skin Disorders). 1880
El herpetismo (Herpes). 1880
De la pellagra (On Pellagra). 1881
ªLecciones sobre la pellagra (Lectures on Pellagra). 1881
ªEccema agudo simple ó pseudo-exantemático en declinación del brazo y mano (Acute Simple or Pseudo-Exanthematous Eczema in Process of Resolving on the Arm and Hand). 1881
ªElefantiasis de los árabes de la pierna y pie izquierdos de un hombre, consecutiva a una escrofúlide exudativa de todo el miembro; esclerosis del tejido conjuntivo (Elephantiasis Arabicum of the Left Foot and Hand of a Man, Consequent to Exudative Scrofula of the Entire Limb; Sclerosis of Connective Tissue). 1881
Del reumatismo y de las dermatosis reumáticas (On Rheumatism and Rheumatic Dermatoses). 1881
ªEscrofúlide exudativa de la cara y cuello de una niña (Exudative Scrofula of the Face and Neck in a Female Child). 1881
El reino intermedio (The Middle Kingdom). 1881-2
ªNevus vascularis; úlcera varicosa y callosa de la pierna izquierda (Vascular Nevus: A Callous and Varicose Ulcer on the Left Leg). 1882
ªEritema elefantiásico del brazo derecho de una mujer (Elephantiasic Erythema of the Left Arm in a Woman). 1882
Influencia de las enfermedades de la piel en las perturbaciones mentales (The Influence of Skin Diseases on Mental Disorders). 1888
Consejos para el mejor tratamiento de ciertas dermatosis (Suggestions for the Improved Treatment of Certain Dermatoses). 1889
<i>Sur le traitement comparatif du lupus.</i> 1890 (French translation)
ªTratamiento comparativo del lupus (Comparison of Treatments for Lupus). 1890
ªPrograma de un nuevo curso de dermatología (Syllabus for a New Course in Dermatology). 1890
ª <i>Sur la contagion de la lèpre et le nombre probable de lépreux qui existent en Espagne (en dehors des Antilles, Philippines et Canaries)</i> (On Contagion in Leprosy and the Probable Number of Leprous Patients in Spain, Excepting the Antilles, Philippines, and Canary Islands). 1890
Aforismos de dermatología práctica (Aphorisms of Practical Dermatology). 1895-1896

ªArticles found only in Index Medicus.

wax models (*moulages*) principally by E. Zofio, a painter and sculptor who belonged to the Army Medical Corps. His figures formed the basis of the collection of the Olavide Museum, which was opened in 1882 as part of the Hospital San Juan de Dios.⁷

The aim of this study was to determine which of Olavide's books and articles can be found today in the United States. World Cat (Table 1) was used to search for Olavide's books; Index Cat (Tables 1 and 2) (Index Catalogue of the Library of the Surgeon-General's Office) was used to locate all books and articles written by Olavide; and finally Index Medicus (Table 3) was consulted to find Olavide's medical articles.

Copies of each article were requested from the National Library of Medicine (NLM) through interlibrary loan in order to confirm their existence and the correctness of the citation. Many articles were published several times in different journals, which can be a source of confusion.

A century after his death, the legacy of José Eugenio Olavide survives in his books and articles, and in his museum. Although he never crossed the Atlantic, Olavide's ideas, knowledge, and writings brought his scientific achievements and

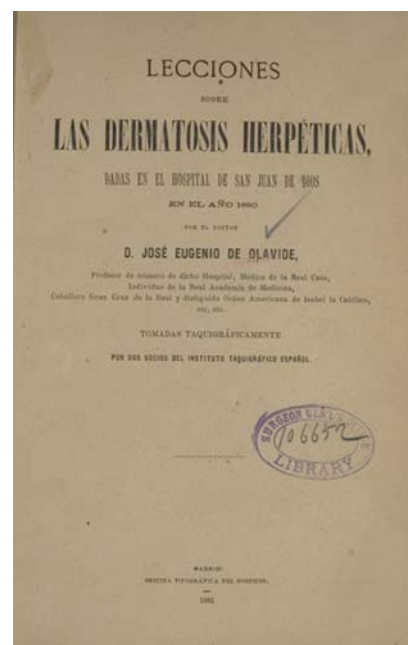
**Figure 1.**



Figura 2.

passion for dermatology to the New World. Who could have imagined that in the 21st century the United States, a country unknown to Olavide, would possess copies of the majority of his books and articles?

One of the interesting aspects of this project is that, in addition to learning more about the father of Spanish dermatology, the NLM provided an opportunity to take photographs (thanks to Light, Inc. and the photographer Jeff Knab). In this way it was possible to document some of the covers of Olavide's works (Figures 1 and 2).

Acknowledgments

To Mary Teloh, Special Collections Librarian, Eskind Biomedical Library, Vanderbilt University, for her valuable assistance in my literary research over the past few years, and for teaching me how to do a historical book search.

To Crystal Smith, History of Medicine Reference Librarian, National Library of Medicine, for her help in locating historical works during my visits to the NLM, and for her long-distance support between visits.

To Jeff Knab of Light Incorporated, for the magnificent photographs of Olavide's books in the NLM.

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Proximal White Subungual Onychomycosis Due to *Fusarium* Species

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To the Editor:

Proximal white subungual onychomycosis (PWSO) is the most unusual presentation of onychomycosis.



Figure 1. Whitish color on the proximal third of the nail plate and matrix.

Trichophyton rubrum is the most common causative agent, although other species such as *Trichophyton megninii*, *Trichophyton schoenleinii*, *Trichophyton tonsurans*, *Trichophyton mentagrophytes*, and *Epidermophyton floccosum* have also been implicated.

The condition has traditionally been reported in immunodepressed patients, above all those with human immunodeficiency virus (HIV) and in other immunodeficiencies. In recent years cases of PWSO have also been diagnosed in immunocompetent patients, and we report a new case of this.

The patient was a 19-year-old man receiving treatment for nodulocystic acne with oral isotretinoin and no other relevant history, who presented an abnormal toenail with onset several months previously. There had been no known previous trauma and the infection did not respond to the application of a topical antifungal agent prescribed by his family physician.

On examination, the nail plate on the right great toe revealed discreet subungual hyperkeratosis together with a creamy-white color on the proximal third of the nail with involvement of the nail matrix (Figure). There was no

sign of paronychia and no involvement of other fingernails or toenails.

Fungal cultures of the nail plate showed the presence of *Fusarium* species. Routine blood tests including full blood count, erythrocyte sedimentation rate, and biochemistry gave completely normal results, and the patient tested seronegative for HIV.

Treatment with itraconazole (200 mg/d over 4 weeks) was prescribed, and a clear clinical improvement was seen.

Fusarium species are nondermatophyte molds that tend to occur naturally as saprophytes in the soil and as pathogens in plants.¹ Although infections can occur in humans, they are normally precipitated by local or general predisposing factors. Systemic infections are rare and only occur in immunodepressed patients.² Onychomycosis caused by *Fusarium* species almost always affects the great toe, especially when accompanied by dystrophic and traumatic abnormalities or where nails were previously infected with dermatophytes.³ Wearing sandals or walking barefoot can encourage the condition.² Most of the cases described in the literature are characterized by extensive paronychia, but this was not the case in our patient.

Invasion of the toenail by *Fusarium oxysporum* is relatively uncommon despite the widespread distribution of the mold, implying that the toenail may be a portal of entry for systemic infections in immunodepressed patients,⁴⁻⁶ with the associated worse prognosis.

The condition manifests itself clinically as the typical form of proximal subungual onychomycosis, occasionally with the presence of onycholysis or subungual hyperkeratosis.

Treatment of *Fusarium* onychomycosis is not a straightforward matter.² Better levels of response are reported with ungual avulsion followed by the application of topical antifungal agents, giving an improvement in most immunocompetent patients. Itraconazole (200 mg/d over 4 weeks or in pulse therapy) has also been used with some success.²

We would like to present the case of an immunocompetent patient who was diagnosed with proximal white subungual onychomycosis caused by *Fusarium* species.

We also stress the value of microbiological cultures and the need to rule out immunosuppression—especially by HIV

infection—in such ungual disorders, which are almost exclusive to immunodepressed patients and rarely diagnosed in immunocompetent individuals.

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Temporary Thrombocytopenia Probably Induced by Isotretinoin

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To the Editor:

Isotretinoin is a drug that is widely used to treat severe nodular or cystic acne.¹ It can cause serious adverse effects that should be recognized and monitored by clinicians. We report a case of profound thrombocytopenia due to treatment of severe acne with isotretinoin. This case illustrates a serious adverse effect that can occur at any stage of treatment. A review of the literature revealed only 4 studies on this topic.²⁻⁵

A 29-year-old Caucasian woman with nodular and cystic acne refractory to other therapies began treatment with 40 mg/d isotretinoin after providing written informed consent. The patient was taking no other medication except oral contraceptives (ethinylestradiol and cyproterone acetate), which she had begun 3 years earlier. The contraceptive medication was maintained. All laboratory test results prior to treatment (including biochemistry and blood counts) were normal.

A month later, the acne had improved significantly and treatment with isotretinoin was well tolerated, except for cheilitis. Further biochemistry and blood counts were normal. No other medication was prescribed during this period.

Six months after beginning treatment, the patient visited our department due to spontaneous vaginal bleeding that had begun 10 days earlier and was not related to menstruation. A petechial exanthema was visible on the torso and limbs. A

blood count at this time revealed a platelet count of $41 \times 10^3/\text{mm}^3$. Isotretinoin therapy was suspended and new treatment was instated with 100 mg/d prednisone; oral contraceptive medication was maintained. After 9 days, the platelet count had returned to normal ($179 \times 10^3/\text{mm}^3$) and prednisone was suspended. The Coombs test and tests for antinuclear antibodies, anticardiolipin, human immunodeficiency virus, hepatitis B and hepatitis C virus, rheumatoid factor, antistreptolysin O, and antiplatelet antibodies were negative. The platelet count remained normal 18 months later.

Isotretinoin has been shown to cause a long list of secondary effects, including thrombocytopenia, of which only 4 cases

have been previously reported.¹⁻⁴ The test for antiplatelet antibodies is usually positive in thrombocytopenia induced by isotretinoin.⁶ This test was negative in our patient, suggesting that the process was mediated by nonimmunologic mechanisms. We cannot rule out the implication of the oral contraceptives in this case, though we believe it to be improbable.

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Giant Blister Due to Cutaneous Larva *Migrans*

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To the Editor:

In recent years, the prevalence of exotic imported parasitic diseases has risen considerably within Europe due to tourism and migrational movements. Most of these diseases are characterized by cutaneous lesions; cutaneous larva *migrans* (CLM) is particularly common.¹

A 26-year-old man with no relevant history came urgently to our clinic due

to a pruritic skin lesion on the sole of the right foot from 7 days previously, with no history of prior injury. He reported no general malaise or other systemic manifestations.

The physical examination revealed an inflamed, serpentine lesion with papules and vesicles, located on the inner side of the right foot (Figure 1), that rapidly progressed to form a giant blister that hindered walking (Figure 2).

Additional tests included a complete laboratory workup and chest radiograph that showed no significant abnormalities. The clinical diagnosis was CLM and treatment was started with albendazole 200 mg every 12 hours for 5 days. The patient recovered completely and the lesions gradually disappeared over 10 days.

CLM is a parasitosis caused by penetration and migration of nematode larvae through the skin. At present, these larvae are usually acquired in tropical regions with warm, humid climates, and the most important etiologic agent is *Ancylostoma braziliense*, although *A. caninum* and *Uncinaria stenocephala*^{2,3} are other species implicated. Humans are an inappropriate host for these parasites and, therefore, only experience cutaneous lesions (the larva remains in the skin without completing its life cycle, as it is unable to cross the basement membrane due to a lack of the necessary enzymes⁴).



Figure 1. Serpentine lesion with papules and vesicles located on the inner side of the right foot.



Figure 2. Giant blister on the right foot.

Clinically, the initial lesion is a papule that appears a few hours after penetration. The typical lesions appear within 4 to 6 days and are characterized by slightly elevated, mobile and migratory, sinuous and erythematous paths, 2 to 4 mm wide and 15 to 20 cm long, with a vesicle of serous content at the terminal end. Rare manifestations, such as folliculitis, hive-like rashes, and tinea pedis, have been reported.^{3,5,6} As the larva migrates, it travels between several millimeters and up to 1 or 2 cm per day, particularly at night, tracing a readily recognizable path.⁷ The lesions can be found on any part of the body exposed to the source of contamination (predominantly soles, back, buttocks, knees, and thighs) and cause severe pruritus, which leads to insomnia and scratching that can result in secondary bacterial infections. The skin rash may be accompanied by eosinophilia, elevated immunoglobulin (Ig) E levels, and even pulmonary infiltrates with eosinophilia, caused by hematic dissemination of the larva (Loeffler syndrome).⁸

The diagnosis is mainly based on clinical symptoms, particularly, the obvious serpentine lesions and difficulty to isolate the parasite in a skin biopsy.⁹ Several authors propose the use of epiluminescence microscopy to confirm the diagnosis and enzyme-linked immunosorbent assay techniques to detect specific IgG.¹⁰ The differential diagnosis should be performed with other types of parasitosis, myiasis, scabies, phytophotodermatitis, and erythema chronicum migrans.⁴

The larva usually disappears by itself within 1 to 6 months; however, our patient experienced severe pruritus and extreme discomfort that required

adequate treatment. Although several therapeutic options, such as cryotherapy, topical thiabendazole,¹¹ and oral thiabendazole (50 mg/d) are available, the current treatment of choice is albendazole (400–800 mg/d for 5 days¹²). Flubendazole¹³ (200 mg/d for 5 days) and ivermectin^{5,14} (200 µg/kg as a single dose) may be therapeutic options in the future.

The patient we describe had a large blister caused by CLM of unknown pathogenesis, although we believe that its formation may be due to 1 of 3 mechanisms: 1) delayed hypersensitivity reaction, with the resulting release of unknown antigens from the larval infection; 2) irritation or contact allergic reaction caused by the topical treatments (our patient had not used any previous treatment), or 3) release of lytic enzymes by the larva itself.

Given the excellent therapeutic response with albendazole and the absence of adverse reactions, we consider, along with other authors,^{4,12,13} that this drug should be considered the first-choice treatment.

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Specific Immunotherapy With House Dust Mite Allergens in an Adult With Severe Atopic Dermatitis

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To the Editor:

Atopic dermatitis is a multifactorial chronic inflammatory disease whose unpredictable clinical course is influenced by a complex genetic basis (atopic diathesis) and multiple triggering factors. In adults, atopic dermatitis is characterized by severe pruritus, xerosis, lichenified plaques of eczema, and excoriation. No curative treatment is yet available. Specific immunotherapy with house dust mite allergens has recently been reported to be effective in adult patients with severe atopic dermatitis who are sensitized to these allergens.¹

We describe a 25-year-old man who came to our clinic in January 2006 for a severe flare-up of atopic dermatitis over 40% of his body. He presented an objective SCORing Atopic Dermatitis (SCORAD) score of 39.5 and a total SCORAD score of 55.5 (Figure 1). The laboratory workup showed a total serum immunoglobulin E (IgE) of 2919 kU/L and alanine aminotransferase of 192 U/L. Relevant history included chronic atopic dermatitis from childhood, persistent rhinitis, childhood asthma (currently asymptomatic), recurrent facial herpes, and chronic liver abnormality of unknown origin. The

patient usually followed treatment consisting of topical emollients, corticosteroids, and tacrolimus, plus non-sedating antihistamines and oral acyclovir. The acute flare-up was treated by adding sedating antihistamines, oral antibiotics, and oral corticosteroids with clear improvement. Phototherapy with narrow-spectrum UV-B was subsequently started, but was switched due to lack of effectiveness to psoralen-UV-A baths for 2 months, with excellent response. Patch testing with the standard GEIDAC panel from the Spanish Contact Dermatitis and Skin Allergy Research Group (Grupo Español de Investigación en Dermatitis de Contacto y Alergia Cutánea) was negative at 96 hours, and prick tests with airborne allergens showed sensitization to *Dermatophagoides pteronyssinus* (Der p, 4 × 4 mm), *D. farinae* (Der f, 5 × 4 mm), and grass pollens (3 × 3 mm). IgE-specific antibodies against Der p and Der f were above 100 kU/L (Class 6). In September 2006, the atopic dermatitis worsened, with an objective SCORAD score of 30, a total SCORAD score of 45, and a total serum IgE of 7133 kU/L. The patient could not undergo phototherapy, however, and refused oral

immunosuppressive therapy. Because he was highly sensitized to house dust mites, a decision was made to use subcutaneous specific immunotherapy with polymerized house dust mite allergens from the Diater laboratory, which includes the Der p 1 (45 %), Der f 1 (45 %), Der p 2 (4.5 %), and Der f 2 (4.5%) allergens. In November 2006 the patient started the initiation phase, which consisted of weekly administration of increasing allergen doses. From the fourth week, he switched to maintenance therapy at the maximum dose (0.5 mL, allergen mass 2.5 µg) once monthly, and this therapy was ongoing at the time of writing without any adverse effects. From the second month of specific immunotherapy, the patient reported an obvious improvement in his symptoms, reducing the use of topical corticosteroids and tacrolimus and oral antihistamines. One year after the start of specific immunotherapy, the patient had an objective SCORAD score of 8, a total SCORAD score of 17, a total serum IgE of 2290 kU/L, and an overall response to treatment considered to be moderate by the patient and noticeable by the physician (Figure 2). Moreover, the patient had no asthma symptoms, although his persistent rhinitis was unchanged.

Atopic dermatitis has multiple triggers, including house dust mites in sensitized patients. *Dermatophagoides* feed on human skin scales and are found in large quantities in mattresses, pillows, stuffed animals, sofas, rugs, and carpets. House dust mites can trigger eczema flare-ups by inhalation² and by skin contact, as shown in patch testing.³ Subcutaneous specific immunotherapy with house dust mite allergens was first used in atopic dermatitis many years



Figure 1. Patient symptoms in January 2006. SCORAD: 55.5.



Figure 2. Patient symptoms in October 2007, 1 year after starting specific immunotherapy. SCORAD: 17.

Table. Recent Clinical Studies on Subcutaneous Specific Immunotherapy for House Dust Mites in Atopic Dermatitis

First Author	Type of Study	Patients and Groups	Test Allergens	Baseline SCORAD	SIT Regimen	Lost to Follow-up	Adverse Effects	Efficacy
Werfel 2006 ¹	Randomized, double-blind	89 patients between age 18 and 55 years; 3 groups with 3 different doses	Der p 1 and Der f 1 from ALK-SCHERAX	> 40	Weekly for 1 year	42% patients	< 1%: mild hives and itching; no flare-up of AD	Significant, dose-dependent decrease in the use of topical corticoids and SCORAD in all 3 groups
Bussmann 2007 ⁵	Open-label	25 patients between age 5 and 65; 1 group	Der p and Der f from LETI	39.6	Monthly for 8 months	24% patients	8%: 1 AD flare-up and 1 mild difficulty breathing	Significant decrease in SCORAD

Abbreviations: AD, atopic dermatitis; Der f, *Dermatophagoides farinae*; Der p, *Dermatophagoides pteronyssinus*; SIT, specific immunotherapy.

ago.⁴ Two clinical studies have been published in the past year on this treatment, in which patients with atopic dermatitis and high house dust mite sensitization (IgE-specific antibodies ≥ 3.5 kU/L, class ≥ 3) were successfully treated with very few adverse effects^{1,5} (Table). In our case, we opted for specific immunotherapy with polymerized allergens because of its excellent efficacy, safety, and convenience profile.

Although a new treatment should not be proposed based on a single case, the authors feel that studies should be conducted to compare the therapeutic effect of specific immunotherapy to that of usual treatments for atopic dermatitis,^{6,7} and that specific immunotherapy with house dust mite allergens should be considered in

patients with severe atopic dermatitis who are sensitized to these allergens.

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