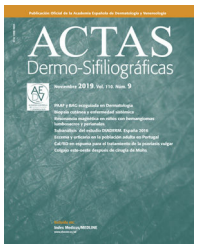
Actas Dermosifiliogr. 2020;111(9):709–710

ACTAS Dermo-Sifiliográficas

Full English text available at www.actasdermo.org



OPINION ARTICLE

Spanish Dermatology in the COVID-19 Era☆

La Dermatología española en la era de la COVID-19

J. Romaní

Servicio de Dermatología, Corporación Sanitaria Parc Taulí, Sabadell, Universidad Autónoma de Barcelona, Spain

Received 29 April 2020; accepted 9 May 2020

At the beginning of March 2020, life was normal, marked by the everyday vicissitudes of our work, our family, and our free time. Change is the only immutable thing in existence, but in our postmodern, hedonist, and self-satisfied society, we could not have imagined the events that were about to befall us and which have put us to the test in these past weeks.

As with the 1918 influenza pandemic, a pandemic caused by an especially infectious and lethal coronavirus spread throughout the world from China, striking the heart of southern Europe with particular virulence. In the early days, Spanish dermatologists were on hold. We restricted visits, held virtual consultations, managed our schedules over the phone, or deprogrammed operating theaters with the expectation of being able to operate on our patients within a few weeks. This was not to be.

In a matter of days, many hospitals were in a state of collapse and many of us were mobilized to attend the wards of patients admitted with COVID-19 or incorporated into the emergency department. Our residents had to suspend their rotations and join the fight, contributing their youth and their enthusiasm. At the bottom of a box, we found our old stethoscope and at the bottom of our memory we found the reflexes of the internal-medicine and emergency physicians that we had once been during our time as residents. With barely any time to go over diagnosis or treatment guidelines, without managing to find that first-year resident's notebook, where we jotted down the dosages of heparin, antibiotics, I.V. therapy, or the keys to interpreting an ECG, we went to the frontlines to fight the enemy with the weapons of a dermatologist: a solid grounding in medicine and a will of iron. After several hour in the hell of the COVID-19 wards, we were applying noninvasive ventilation, ordering CT angiograms to rule out pulmonary embolism, prescribing lopinavir/ritonavir, hydroxychloroquine, or a bolus dose of methylprednisolone, and deciding whether a patient was a candidate for tocilizumab or anakinra.

We know some of those drugs better than our colleagues from the infectious diseases department and they soon added us, together with the rheumatologists, to the treatment committees, listening to our advice and our views on the functioning of the innate and adaptive immune systems, and on the cytokine storm caused by the virus. Pneumonia due to COVID-19 is infectious at first, but after a few days it becomes a purely immunological disorder, like guttate psoriasis, triggered by a streptococcal infection, or Sweet syndrome, precipitated by a viral infection. We know better than anyone why obese patients had a worse prognosis in the event of a cytokine storm, due to their baseline levels of IL-6 or TNF. We also suspected early on that our patients with psoriasis or hidradenitis suppurativa who were undergoing biological therapy should not suspend the treatment, as it would very likely have a protective effect against developing a severe disease due to the coronavirus.

Our colleagues in internal medicine, emergency medicine, respiratory medicine, and intensive care, with whom we interact less than we might wish under normal circumstances, were soon pleasantly surprised at the ability of dermatologists, who some had considered, half in joke, half

☆ Please cite this article as: Romaní J. La Dermatología española en la era de la COVID-19. Actas Dermosifiliogr. 2020;111:709–710.

E-mail address: jromani@tauli.cat

seriously, to be merely ''cosmetic doctors'', to manage complex patients on the ward or in the emergency department.

In the first weeks of April, while we struggled on the wards, in the emergency boxes, the work rooms, the nursing control stations, and the rooms, messages began to appear in our WhatsApp groups and on our teledermatology platforms. They showed us photographs of lesions that were indistinguishable from perniosis in the acral region of the hands or feet, or purplish papules on the heels or palms, which suggested to us erythema multiforme or reminded us vaguely of the skin manifestations of parvovirus B19. These same lesions had been seen in China and Italy, but they had not been properly studied, the indexed literature was scarce, and the media began to transmit information with no scientific bases, thus generating considerable confusion. We immediately began to study these lesions the way dermatologists have always done: looking for the systemic disease underlying the skin lesions. This effort has led to the appearance in record time of 3 highly relevant publications in *Actas Dermosifiliográficas*,[1] *International Journal of Dermatology*,[2] and *Revista Azul*,[3] signed by Spanish authors. Following a study of case series, we have concluded that these lesions are a late manifestation of the COVID-19 infection and that, in most of them, the virus is not detectable when the lesions appear, nor are the antibodies that mark the activation of the immune system detected by rapid tests or ELISA tests in serum. Several groups continue to study the mysterious acral lesions to clarify their pathogenesis and determine which prothrombotic, vasculopathic, or autoimmune mediators underlie these atypical post-COVID-19 ''chilblains''.

With the same theme of mobilizing Spanish dermatologists to understand the cutaneous manifestations of the coronavirus, Galván-Casas et al, under the umbrella of the Research Unit of the Spanish Academy of Dermatology and Venereology (AEDV), put together in record time the COVID-skin study, which has already been completed and accepted for publication in the *British Journal of Dermatology*.[4] The importance of this work is enormous and its value can only be calculated when the perspective of time permits. Dermatologists wearing PPE, fighting against the infection on the frontlines, but with our cameras to hand under the layers of plastic and paper, collected evidence of any eruption in the patients, obtaining informed consent and recording them on case report forms. The prospective collection of 375 cases of dermatologic lesions in patients with COVID-19 infection has thrown up a surprising result: clinical signs and symptoms may be accompanied by 5 types of eruption, each one associated with demographic variables, with a temporal relationship with the clinical course, and with prognostic implications. In a nod to statistical ingenuity, when 120 cases were reached, the photographs were subjected to blinded evaluation by 4 dermatologists, who reached a consensus based solely on the clinical presentation. The ability of a single virus to produce 5 independent clinical pictures continues to surprise and suggests activation of different pathogenic pathways.

We have also had to deal with managing our emotions, informing family members that they could not see their loved ones, and prescribing comfort for patients who were coming to the end of their lives. It is not common for a dermatologist to report a death, but we have done so, with all the professional demeanor of which we were capable. Another source of annoyance was the lack of protective equipment, which meant that we had to join battle like kamikaze troops. Finally, the scarcity of medication in the worst weeks and the lack of ICU beds for patients requiring intubation and mechanical ventilation were undesirable situations that should now point the way to those responsible for our health care system: be better prepared for a pandemic if it happens again.

The reflection on the world that awaits us, at least for months or years, is something that dermatologists have been familiar with since we began practising teledermatology: telemedicine and distance learning will become more common. Furthermore, 5 G technology will make it possible to develop robotic applications to perform surgery at a distance, including dermatologic surgery. Artificial-intelligence systems will become commonplace in diagnostic screening and the way knowledge is transmitted and communicated will change, at least partly. Here, initiatives such as the Dermachat congress, organized by Emilio del Río, Mario Linares, and Paco Russo, which was held on 25 and 26 April on a social platform, with almost 1000 people signed up, are a foretaste of what is to come, as already indicated in an opinion article submitted last year and pending publication in *Actas Dermosifiliográficas*.[5] However, distance learning, perhaps at zero cost, cannot completely replace in-person meetings and congresses, but it will have to take its place as a usual, complementary, and absolutely valid format.

To conclude, I believe that life has given us a challenge that has tested our courage and our training. My final sentence is not just optimistic, but full of pride in what we are and because Spanish dermatology will emerge strengthened from this as what it is: the vanguard of the specialty at the global level.

References

1. Romaní J, Baselga E, Mitjà O, Riera-Martí N, Garbayo P, Vicente A, et al. Lesions pernioticas y acrales en Espa ña durante el confinamiento por COVID: analisis retrospectivo de 12 casos. Actas Dermosifiliogr. 2020, http://dx.doi.org/10.1016/j.ad.2020.04.002.
2. Landa N, Mendieta-Eckert M, Fonda-pascual P, Aguirre T. Chilblain-like lesions on feet and hands during the COVID-10 pandemic. Int J Dermatol. 2020, http://dx.doi.org/10.1111/ijd.14937.
3. Fernández-Nieto D, Jiménez-Cauhé J, Suárez-Valle A, Moreno-Arrones OM, Saceda-Corralo D, Arana-Raja A, et al. Characterization of acute acro-ischemic lesions in non-hospitalized patients: a case series of 132 patients during the COVID-19 outbreak. J Am Acad Dermatol. 2020, http://dx.doi.org/10.1016/j.jaad.2020.04.093.
4. Galván-Casas C, Català A, Carretero-Hernández G, Rodríguez-Jiménez P, Fernández Nieto D, Rodríguez Villa A, et al. Classification of the cutaneous manifestations of COVID-19: a rapid prospective nationwide consensus study in Spain with 375 cases. Br J Dermatol. 2020, http://dx.doi.org/10.1111/BJD.19163.
5. Martín-Gorgojo A, Río de la Torre E. Formatos emergentes de congresos y reuniones dermatológicas. Actas Dermosifilogr. 2019 (in press).