A Dermatologia e a Pandemia COVID-19 **Dermatology and COVID-19 Pandemic**

Margarida Gonçalo 📵

Serviço de Dermatologia, Centro Hospitalar e Universitário de Coimbra, Coimbra, Portugal

The new coronavirus disease (COVID-16) caused by SARS-CoV-2 has had, and is still having, a significative impact in the whole world population and the Dermatologists, their patients and their students are not an exception.

Due to the obligatory confinement many health resources had to shut down, Dermatologists had their jobs restricted, and the appointments of our patients were postponed, certainly with deleterious consequences for the patient and for the health resources, namely in melanoma, where a 3-month delay can change a T1 into T2 melanoma with a consequent reduction in the estimated 5- or 10-year survival. In other situations, appointments were replaced by non-presential "consultations" by telephone, or other technological facilities like e-mail, WhatsApp, video-calls with some difficulties in communication and lesion visualization, but well-appreciated by some patients who saw the opportunity to resolve some questions without coming to the Hospital. Although these "appointments" are also highly time-consuming for the physician, certainly, some of the experience gained in this period will be kept in the future to monitor some patients with chronic diseases at a distance and prevent accumulation of patients in waiting-rooms.

With this viral pandemic, dermatologists feared infection in their patients under treatment with immunosuppressive or biologic drugs. Most disease study groups, including the Portuguese groups, issued recommendations on how to deal with these drugs during this pandemic. Happily, initial considerations on the safety of therapies that interfere with IL-17, IL-23, IL-4 or anti-IgE, that were issued based only on the conceptual knowledge of the host antiviral immune response and the known mechanism of action of these drugs, have been confirmed through many recently published cases.^{1,2}

Teaching of Dermatology, both pre and postgraduate teaching, was completely changed with students receiving classes by several online platforms with the direct access to the patient's words and his lesions completely denied and replaced by photos where touch and three-dimensions of the lesions cannot be appreciated. Residents had their formation interrupted and some had to reinforce the medical teams in the COVID-19-dedicated wards. Certainly a unique and unforgettable experience!

Dermatological manifestations were largely ignored (or absent) in China, where this pandemic began. But in European hospitals with a high number of COVID-19 patients, particularly in Italy and Spain, dermatologists also had to join teams caring for these patients and this revealed that Dermatology also has his place in caring COVID-19 patients. Recalcati from the Hospital of Lecco in Lombardy first reported cutaneous lesions in about 20% of COVID-19 patients.3 After him, multiple reports have called the attention to acral syndromes with chilblain-like or erythema multiforme-like lesions that occur mostly in young patients, some asymptomatic with negative naso-pharyngeal swabs and serology,⁴ cutaneous livedoid and vasculitic lesions usually associated with severe disease, lesions occurring late in the course of disease (exanthema) others as its presenting manifestation (acute urticaria),⁵ others possibly representing drug-induced maculopapular exanthema or severe adverse drug reactions (DRESS) whereas others suggest reactivation of other virus during the SARS-CoV-2 induced cytokine storm (pityriasis-rosea-like lesions or herpes zoster). There are two recent classifications of cutaneous lesions into 5 or 6 subtypes, respectively by Galván-Casas et al, based on 375 Spanish cases,6 and more recently by Marzano et al from Italy⁷: pseudo-chilblain lesions, urticarial lesions, maculopapular exanthema, exanthema with vesicles, livedoid pattern and purpuric/necrotic/vasculitic lesions. Moreover, using histopathology, immunohistochemistry and other techniques, dermatologists contributed to the understanding of cutaneous lesions: some are specific viral lesions, as both viral proteins and the receptors used for viral entry into the cells are expressed in the skin,8 whereas others are probably the expression of the exaggerated immune response to the

Dermatology has also given another important contribution in this pandemic with the prevention, diagnosis and treatment of irritant or allergic contact dermatitis or pressure ulcers in healthcare personnel wearing heavy personal protective equipment for many hours or of hand eczema in susceptible individuals who exaggerate hand cleaning and use of hydroalcoholic solutions. 10

Correspondência: Margarida Gonçalo Serviço de Dermatologia Centro Hospitalar e Universitário de Coimbra Praceta Mota Pinto 3000-075 Coimbra DOI: https://dx.doi.org/10.29021/spdv.78.2.1237 Recebido/Received 2020/06/15

Aceite/Accepted 2020/06/15

Publicado/Published 2020/06/30

© Autor (es) (ou seu (s) empregador (es)) 2020 Revista SPDV. Reutilização permitida de acordo com CC BY-NC. Nenhuma reutilização comercial.

© Author(s) (or their employer(s)) 2020 SPDV Journal. Re-use permitted under CC BY-NC. No commercial re-use.

Editorial

Reflecting the importance of COVID-19 on Dermatology there is an increasing number of publications on dermatological manifestations of SARS-CoV-2 infection and on its impact on dermatology (608 entries on PubMed for "COVID-19" and "Dermatology" until June 14) although for the moment nothing appears in the Journal of SPDV. This is not due to the lack of Portuguese cases that have already been published¹¹ or are trying to be published elsewhere. It was therefore my commitment to call the attention to the importance of Dermatology in this pandemic and sincerely hope there is some national experience that may have a place in our journal.



Margarida Gonçalo http://orcid.org/0000-0001-6842-1360

REFERENCES

- Conti A, Lasagni C, Bigi L, Pellacani G. Evolution of COVID-19 infection in four psoriatic patients treated with biological drugs. J Eur Acad Dermatol Venereol. 2020 (in press). doi: 10.1111/jdv.16587.
- Ferrucci S, Romagnuolo M, Angileri L, Berti E, Tavecchio S. Safety of dupilumab in severe atopic dermatitis and infection of Covid-19: two case reports. J Eur Acad Dermatol Venereol. 2020 (in press). doi: 10.1111/jdv.16527.
- Recalcati S. Cutaneous manifestations in COVID-19: a first perspective. J Eur Acad Dermatol Venereol. 2020 (in press). doi: 10.1111/jdv.16519.
- Ramondetta A, Panzone M, Dapavo P, Ortoncelli M, Giura MT, Licciardello M, et al. Chilblain acral lesions in the COVID-19 era. Are they marker of infection in

- asymptomatic patients ? J Eur Acad Dermatol Venereol. 2020 (in press). doi: 10.1111/jdv.16636.
- Damme C va., Berlingin E, Saussez S, Accaputo O. Acute urticaria with pyrexia as the fi rst manifestations of a COVID-19 infection. J Eur Acad Dermatol Venereol. 2020 (in press). doi: 10.1111/jdv.16523.
- Galván-Casas D, Catalá A, Carretero Hernández G, Rodríguez-Jiménez P, Fernández-Nieto D, Rodríguez-Villa Lario 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 (in press). doi: 10.1111/bjd.19163.
- Marzano AV, Cassano N, Genovese G, Moltrasio G, Vena G. Cutaneous manifestations in patients with COVID-19: A preliminary review of an emerging issue. Br J Dermatol. 2020 (in press). doi: 10.1111/bjd.19264.
- Xiaotong X, Zihao M, Zhenzhen W, Zheng P, Hong L, Furen Z. High expression of ACE2 on the keratinocytes reveals skin as a potential target for SARS-CoV-2. J Invest Dermatol. 2020 (in press). doi: 10.1016/j. iid.2020.05.087.
- Kanitakis J, Lesort C, Danset M, Jullien D. Chilblain-like acral lesions during the COVID-19 pandemic ("COVID toes"): histologic, immunofluorescence and immunohistochemical study of 17 cases. J Am Acad Dermatol. 2020 (in press). doi: 10.1016/j.jaad.2020.05.145.
- Balato A, Ayala F, Bruze M, Crepy M-N, Gonçalo M, Johansen J, et al. European Task Force on Contact Dermatitis statement on outbreak and the risk of adverse cutaneous reactions. J Eur Acad Dermatol Venereol. 2020 (in press). doi: 10.1111/jdv.16557.
- Calvão J, Relvas M, Pinho A, Brinca A, Cardoso JC. Acro-ischemia and COVID-19 infection: clinical and histopathological features. J Eur Acad Dermatol Venereol. 2020 (in press). doi: 10.1111/jdv.16687.