Did Whatsapp® reveal a new cutaneous COVID-19 manifestation?

Editor

In March 2020, Europe became the epicentre of COVID-19 pandemic. Several countries organized nationwide population containment, starting on March 9th in Italy and March 17th in France.[1] For the continuity of care and to avoid in person consultation and disease propagation, the French ministry of health released incentives to facilitate live interactive consultation for COVID and non-COVID patients.[1] The French union of dermatologists created a text messaging group on WhatsApp® to share administrative information about teledermatology, as well as scientific reviews about the pandemic. In the dermatology field, publications related to COVID-19 mostly focused on skin damages of healthcare workers, unspecific viral skin manifestation, and strategies to avoid virus transmission in dermatologists' practices, favouring teledermatology implementation.[2–5]

On the Whatsapp® group, which included four hundred dermatologists, atypical skin eruptions or lesions of suspected or confirmed COVID-19 patients were posted. While some dermatologists were academics, most had private practices. We performed an analysis of all 295 cases submitted in this group from its creation date on March 14th till April 10th 2020. The first post was an atypical eruption of vesicles in a suspected COVID-19 patient (Fig. 1). Then, after the first atypical hands eruption reported on March 23rd, an outbreak of chilblain-like lesion was reported during the third week of containment in pauci-symptomatic COVID-19 patients (Fig. 1). On this Whatsapp® group, 74% (N = 219) of cases were shared for the first time by the members, 4% (N = 11) were re-posted from a dermatologist Facebook® network, and 22% (N = 65) from the group administrator network. Chilblains or Chilblain-like lesions represented 146 posts, and 149 posts included other suspected COVID19-related skin eruption, for example, urticaria, rash, chickenpox-like or pytiriasis rosea. A signal was also detected in other European physicians' networks, and 36 patients submitted their testimonials through the SNDV website (Fig. 2). The number of observed chilblain or chilblain-like lesions during this pandemic is very unusual, especially in spring time and in patients confined at home. A previous case was reported in a child in Italy. Further studies are needed to establish the role of COVID-19 in these lesions, but altered coagulation status, and micro-thrombi observed in severe COVID-19 patients are consistent with the observed lesions. This alert was pointed out through the SNDV messaging group. Since most of their practices were on hold, French dermatologists replaced in-person consultation by live-and- interactive consultation or store-and-forward teledermatology. This helped detect pauci-symptomatic skin lesions in patients with pauci-COVID symptoms managed by general

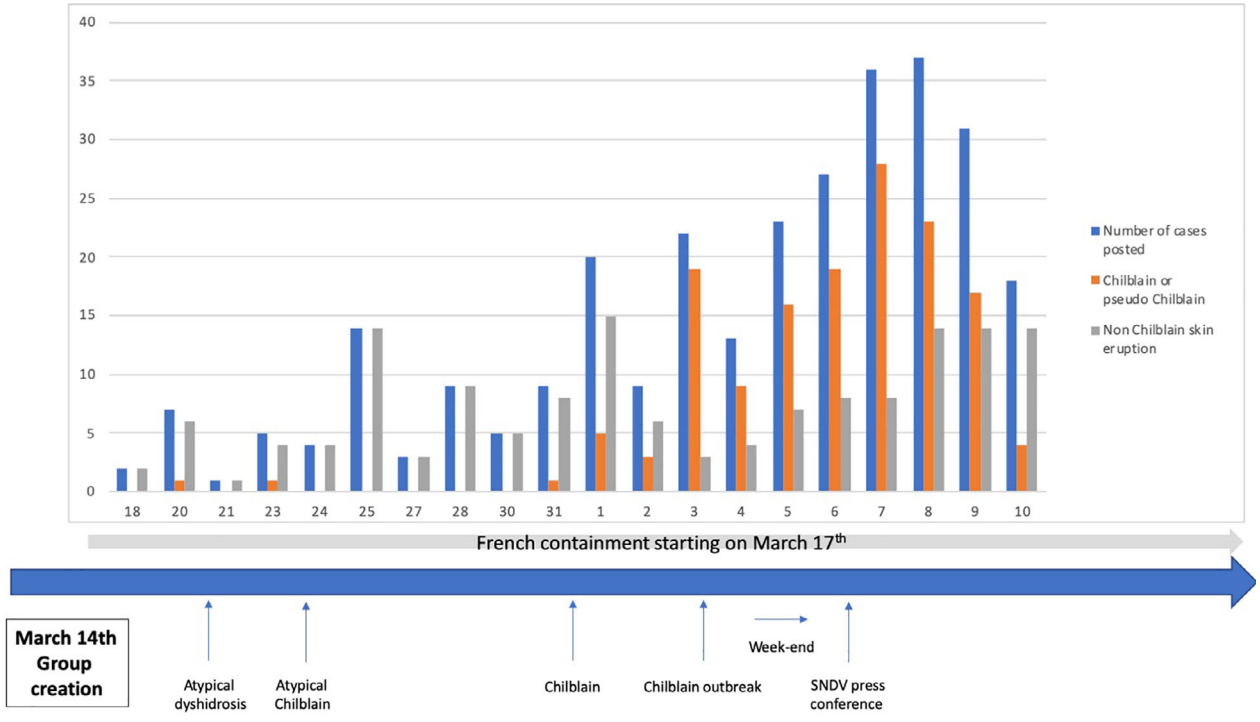

Figure 1 Kinetic and timeline of clinical cases posted by the SNDV dermatologist group.

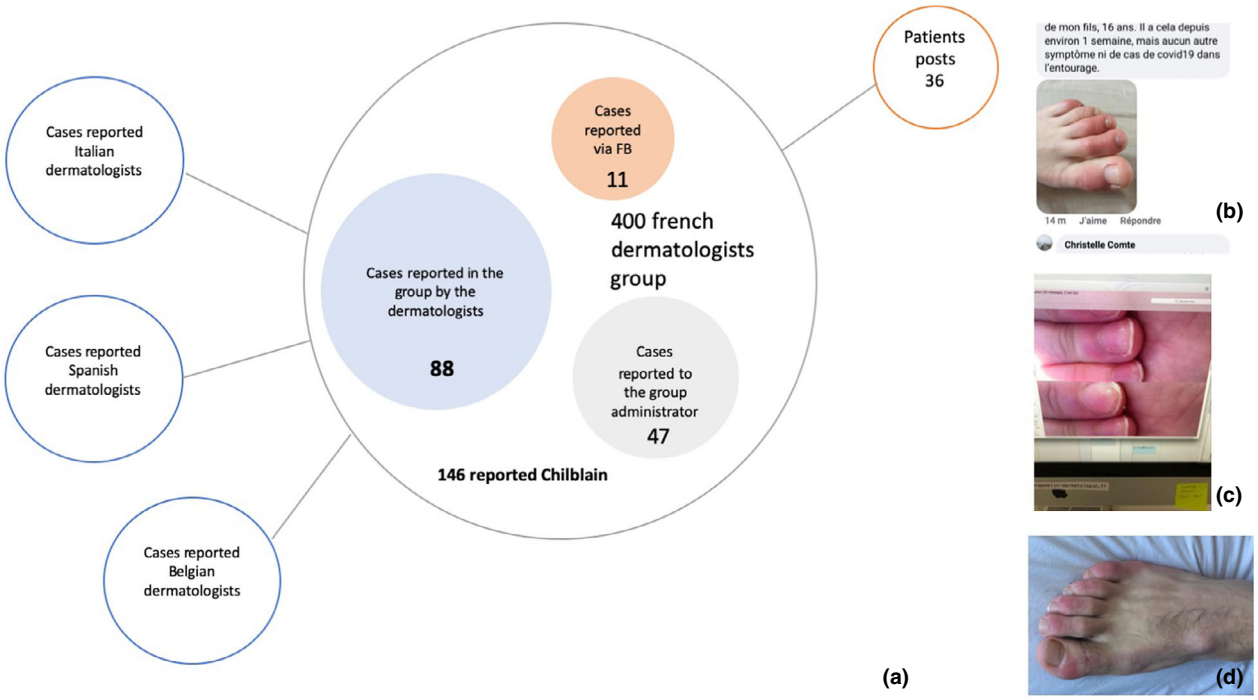

Figure 2 Chilblain: Source of chilblain posts (a), Post on Facebook (b), Chilblain observed by teledermatology (c) and Chilblain (d).

physicians. This clinical presentation was not reported among skin manifestations in inhospital cases series.[3] Similar to anosmia, chilblain may be a symptom mainly reported in COVID-19 outpatients, which supports the important role that dermatologists play in this outbreak control.[6]

COVID-19 outbreak was first described by Dr Li Wenliang using WeChat®. Our observation highlights the strength of social networks or instant text messaging in healthcare providers' activity and the necessity of telemedicine implementation. This crisis urges countries to widespread telehealth adoption.[7] Finally, in the interest of time-saving, social networks can be a platform for novel findings or unusual case reports sharing.[8] In the era of open access science, an expert moderator as well as an express reviewing of published cases are needed to avoid spreading of false or untrustworthy information. We strongly encourage learned societies and healthcare institutions to develop appropriate tools in the field for extraction or release of scientific information. This is a major challenge to limit physician isolation, provide continuous learning, and benefit from collective intelligence. It is time for interactive device-mediated technologies that facilitate sharing of information to contribute to the increasing knowledge and expansion of skill-sets in a new disease.

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Changes in emergency service access after spread of COVID-19 across Italy

Editor,

The Italian National Health System is currently living through some catastrophic days, owing to the rapid spread of COVID-19 across the country. At the time of writing, our Government has passed emergency laws (11 March 2020), with a view to preventing widespread viral infection among the population, which may well lead to an increase in the number of people requiring intensive care unit (ICU) hospital treatment. Currently, most of the northern Italian regions are close to saturation point in terms of the number of available ICU inpatient beds. Albeit dermatologic 'true' emergencies are a small number, many patients access our emergency services (ES) for routine diseases in order to avoid having to wait any length of time for a scheduled dermatological examination. The aim of our study is to analyse any possible changes in access to our ES by examining two different weeks before and after COVID-19 emergency in Italy.

The first week in the pre-COVID-19 era was randomly selected, while the second was chosen during the actual COVID-19 emergency. We analysed a 6-day workload because our Unit does not operate an ES on Sundays. Diseases such as burns, drug eruption, acute urticaria–angio-oedema and skin rash (including psoriasis and bullous autoimmune dermatitis) involving more than 10% of the body surface area, along with acute infection (bacterial or viral) were identified as real emergencies. The remaining pathologies were considered to be unjustified consultations. The week between 21 October 2019 and 26 October 2019 was identified as the pre-COVID-19 (no closure of the outpatients' surgeries available in our Unit for holidays or meetings). The days between 12 March 2020 and 18 March 2020 characterized the weekly activity of our emergency service during the COVID-19 era (days in the run-up to the Government decree-law). In the pre-COVID-19 era, 106 patients accessed our emergency outpatients' room, whereas just 20 cases were examined after the emergency decree-law. The number of unjustified accesses was 60 in pre-COVID era, and 46 patients showed 'true' emergencies. Acute bacterial/viral infections on a par with diffuse skin rashes (19 cases each) were the most common problems, while eight patients accessed the ES for burns. After 11 March 2020, 19 patients referred to the ES. Five patients turned up for an unjustified consultation, while 14 showed a 'true' problem (four diffuse rashes, seven acute infections and three burns). See Table 1 for all the patient details.

The misuse of the emergency consultation facility is a bad habit and it has been estimated that at least half of the patients do not have a 'true' emergency (range 49–82%),[1–6] which is confirmed by our study (60 vs. five unjustified accesses, before/after the COVID-19 pandemic). However, emergencies still exist, even in the presence of a potentially life-threatening virus. Patients suffering from acute myocardial infarction will refer to the ES even in the COVID-19 era, and the same will occur in the case of dermatological emergencies. Drago *et al*.[7] appropriately defined a 'true emergency' in dermatology as a severe dermatosis that requires immediate medical attention and an observation period lasting at least 24 h. A possible bias in our research may be due to the panic related to the COVID-19 disease, which can explain the drop in the number of consultations (106 vs. 19, for an 81% reduction). Our data clearly show a decrease in unjustified referrals (60 vs. four, for a 93% reduction, *P*-value for Fisher's exact test 0.0032) highlighting the misuse of the ES at our Unit. To conclude, a solution for select patient access to ES could be to: (i) implement the number of scheduled examinations by recruiting more dermatologists; (ii) have more outpatients accessing during the daytime, especially in afternoon (an infrequent event in Italy); and (iii) train general practitioners to recognize and diagnose the most commonly occurring dermatosis.

Table 1 Principal characteristics of our patients

	Total number of access	Justified access	Non-justified access	Median age (years)	Male	Female
Pre-COVID	106	46	60	61	56	50
COVID	19	14	5	44	6	13

