

Table 1 Case mix of patients triaged for virtual consultation.

Group 2		Group 3	
Reason for referral	%	Reason for referral	%
Acne	47	Eczema	17
Eczema	18	Psoriasis	20
Psoriasis	11	Cutaneous infection	10
Cutaneous infection	5	Alopecia	7
Pigmentation problem	3	Urticaria	10
Urticaria	2	Intertrigo	7
Vasculitis	1	Lichen planus	3
Drug-related	1	Hidradenitis suppurativa	3
Tattoo reaction	0.5	Other inflammatory	23
Other inflammatory	2		
Other	9.5		

Group 2 were for clinical photographs with telephone consultation and Group 3 were telephone consultation only.

the patient was booked for a virtual clinic. Most (75%) of these patients had successful telephone consultations following receipt of clinical photographs. Patients with acne comprised a significant proportion of this group, and were reviewed and followed up in a dedicated virtual acne clinic. Of the patients receiving virtual consults, 50% were diagnosed and discharged after the initial consultation, while the remaining 50% required follow-up or were referred for further treatment or investigation. Photographs were of variable quality, but nonetheless all except one were considered clear enough to establish a diagnosis and formulate a management plan. Only seven patients were converted to FTF appointments, with reasons including patient choice, inability of the patient to send photographs or complexity of the case.

Group 3 (13%) represented patients with a previous confirmed diagnosis from the dermatology department, or those with a likely diagnosis of urticaria, who were considered suitable for a direct telephone consultation. The majority of these patients (71%) subsequently volunteered to send photographs, which were helpful in most cases.

Interestingly, of all those triaged for virtual consultation (Groups 2 and 3), 38% were removed from the waiting list either because of resolution of the dermatosis, the patient declining appointment for some other reason or lack of patient response to the booking request. This may be an inevitable by-product of prolonged waiting times (mean 10 months) in our cohort at the time of data collection.

In conclusion, using a simple triage model, we were able to appropriately manage the majority of patients entirely virtually, of whom half were discharged successfully. This mitigated the unnecessary risk of attending hospital in the current climate, conserving the limited FTF clinic slots for the most appropriate patients. Administration time for coordinating virtual consultations and requesting photographs was longer than usual, and we are fortunate to have a dedicated 'booking pod'

administration team who have risen to this challenge and worked flexibly to deliver an adapted service. Our model has enabled us to provide continued routine care under these unusual circumstances of COVID-19, but looking ahead into a post-pandemic future, we hope to use lessons learnt to continue this service and reduce FTF clinic throughput in the longer term. Initial verbal feedback from patients has been positive, but we aim to formally assess both patient and clinician satisfaction with the virtual service in the future.

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Chilblains and COVID-19: can recent epidemiological data shed light on the aetiological debate?

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In March and April 2020, at the peak of the COVID-19 pandemic, several countries imposed lockdown measures. Concurrently, a significant number of chilblains were observed in otherwise healthy adolescents and young adults. The physiopathology of these chilblains has not been completely elucidated and their direct link to COVID-19 remains unconfirmed and debated.¹ Reverse transcription (RT)-PCR on nasopharyngeal swabs and anti-SARS-

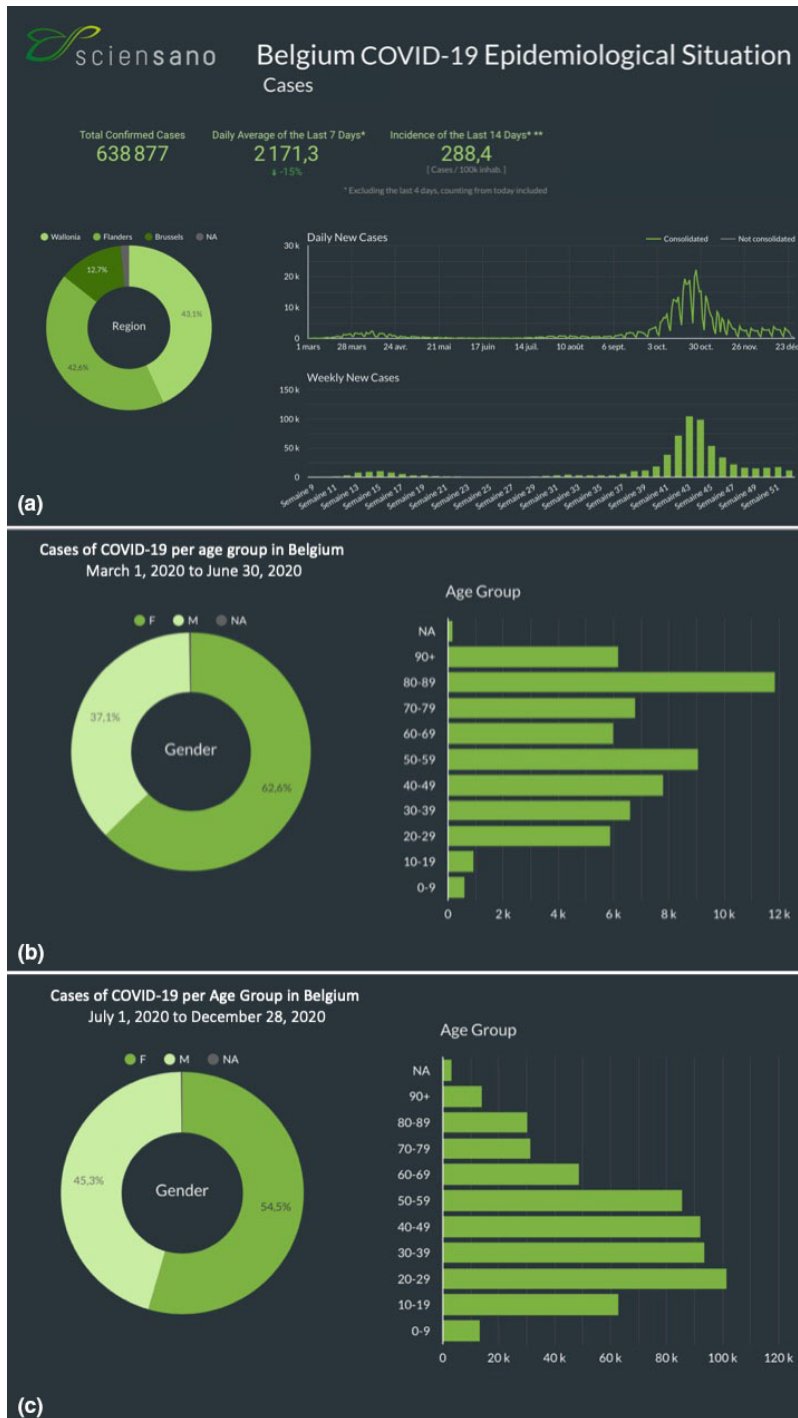


Figure 1 (a) Cases of COVID-19 in Belgium from 1 March 2020 to 28 December 2020; only symptomatic hospitalized patients were PCR-tested from March to June whereas asymptomatic patients were also PCR-tested from July. (b,c) Cases of COVID-19 per age group in Belgium from (b) 1 March 2020 to 30 June 2020 and (c) 1 July 2020 to 28 December 2020. Graphs courtesy of Sciensano, the Belgian institute for health responsible for the epidemiological follow-up of the COVID-19 epidemic (<https://epistat.wiv-isp.be/covid/>).



Figure 2 Clinical appearance of ‘COVID toes’ observed during the second wave of SARS-CoV-2 infections.

CoV-2 antibodies were negative in most patient series reported.² Lifestyle changes associated with lockdown, notably increased sedentariness and prolonged barefoot exposure to cold floors, in predisposed subjects (a high number of patients with antinuclear antibodies positivity and low body mass index) could be a possible explanation for this outbreak of chilblains.^{3,4} The under-reporting of chilblain ‘outbreaks’ in Nordic countries, where strict confinement was not imposed, could also indirectly point towards a link between confinement and chilblains.⁵

An analysis of recent Belgian epidemiological data may shed additional light on the aetiological debate surrounding these lesions. Belgium began experiencing a second wave of SARS-CoV-2 infections from July 2020 and especially from September 2020 (Fig. 1a). Although testing strategies varied, the number of SARS-CoV-2 infected patients during this second wave seems to have exceeded the first.

These new infections were mainly observed in younger subjects (peak in the 10–39 years age group), compared with the March–April wave, which preferentially involved older patients (peak in the 50–90 years age group) (Fig. 1b,c). The demographic characteristics of subjects infected by SARS-CoV-2 in the second wave were therefore similar to those of patients in whom chilblains were previously reported.³ A major factor differentiating the two populations is that from July to November, the population was no longer confined indoors. Although a resurgence of chilblain-like lesions would have been expected in this second wave in parallel with the increase in the number of SARS-CoV-2 infections, especially in the age group concerned, no new cases of chilblains were observed in Belgium during this period, to our knowledge [data from the National Data Collection of skin manifestations associated with COVID-19 (DERMCovid e-registry), along with data from dermatologist, paediatrician and general practitioner networks and our own clinic]. Furthermore, the delay since the new rise of SARS-CoV-2 infections is sufficient to account for late symptom onset.

Interestingly, new cases of chilblains were observed from the beginning of December 2020 (14 patients in our centre), following the implementation of more stringent containment measures in Belgium (closure of sports/fitness centres, increased remote working and

increased home schooling for teenagers) and the return of colder temperatures. Although we cannot formally exclude that the apparent absence of chilblains during the summer and early autumn could be partially explained by people possibly self-diagnosing using the information about ‘COVID toes’ available to the public, this seems improbable given that new cases are again being observed. Furthermore, those patients presenting recently seemed unaware of the nature of their lesions and of a possible association with COVID-19.

The clinical (Fig. 2) and histological presentations of these new cases of chilblains were similar to those observed during the first wave. SARS-CoV-2 RT-PCR on nasopharyngeal swabs was negative for all these patients. Serological tests performed with two different techniques (Elecsys Anti-SARS-CoV-2 Kit and Cobas e602 Analyzer; both Roche Diagnostics GmbH, Mannheim, Germany) and an in-house ELISA developed in Université Catholique de Louvain Lab Research (Institut de Duve) were negative except in one patient who reported having had typical COVID-19 symptoms with anosmia and ageusia, as well as positive RT-PCR 2 months before the emergence of chilblains. Other causes of chilblains such as parvovirus infection, coagulopathy or systemic diseases were excluded. The lesions quickly improved with the application of topical corticosteroids and the reinforcement of protective measures against cold.

Several of the patients with lesions also had chilblains during the first wave, and some of these were included in our first study series.³ Moreover, patients from the first study series were re-contacted and 17 of the 54 patients reported the reappearance of chilblains. SARS-CoV-2 re-infection is an unlikely explanation as this recurrence of chilblains already largely exceeds the isolated reported cases of SARS-CoV-2 re-infections.⁶

In our opinion, these epidemiological data argue in favour of the aetiological hypothesis associating these chilblain-like lesions with lockdown-induced lifestyle changes and against a direct association with SARS-CoV-2 infection.

Author Contributions

Marie Baeck and Anne Herman: Substantial contributions to the conception or design of the work; or the

acquisition, analysis or interpretation of data for the work; Drafting the work or revising it critically for important intellectual content; Final approval of the version to be published; Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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Dermatologists as recipients of COVID-19 stigma

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Linked article: Ibrahim LS *et al.* *Clin Exp Dermatol* 2021; **46**: 377–8.

We read with interest the recent article by Ibrahim *et al.* in *Clinical and Experimental Dermatology*, entitled 'The impact of COVID-19 on dermatology outpatient services in England in 2020'.¹ As excellently presented by the authors, the ongoing novel coronavirus (COVID-19) pandemic is presenting many pressing challenges to the dermatological community, including the reduction of outpatient appointment attendance as well as the safety

considerations of the use of biologic, immunosuppressive and targeted therapies. The aforementioned challenges are superimposed upon the need for acquisition of high-quality teledermatology equipment, limitation of daily activities to priority cases and postponement of elective aesthetic dermatology procedures, which directly impact the financial aspect of dermatologists.² In our opinion, the imposed stigma and social discrimination that dermatologists may face at their workplace and surroundings should also be added to this list. At the beginning of the outbreak, several groups of people reported experiencing stigmatization because of COVID-19, including people of Italian or East Asian descent as well as people who had travelled in COVID-19-affected areas.³ Stigma has also been reported to occur even after a person has been released from quarantine, even though they are not considered a risk for spreading the virus to others.⁴ Stigmatized groups can be subjected to social avoidance and rejection, denial of healthcare, education, housing or employment, and even physical violence.⁴ The emerging fear and anxiety since the declaration of the outbreak of COVID-19 as a public health emergency can also lead to social stigma towards healthcare professionals (HCPs), as the Centers for Disease Control have addressed.³ In an effort to counter stigma, the World Health Organization (WHO) has worked with the International Federation of Red Cross and Red Crescent Societies, and the United Nations International Children's Emergency Fund on a guide to preventing and addressing the social stigma associated with the disease.⁵ Additionally, the WHO Director-General has repeatedly called for 'solidarity, not stigma' to address COVID-19.⁶ As public health emergencies, such as the outbreak of COVID-19, are stressful times for people and communities, fighting stigma is of vital importance. HCPs themselves are not immune to such shame; being labelled, stereotyped and discriminated against because of a potential negative affiliation with COVID-19, may significantly affect their emotional or mental health during these difficult times, and allow myth and rumour to gain traction. Dermatologists are now considered first-line healthcare workers, because of the evolving knowledge about the cutaneous manifestations of COVID-19 and the increasing involvement of dermatology professionals in the management of this crisis as the pandemic unfolds. Reports of various incidences of HCPs experiencing harassment, stigmatization or even physical violence have made headline news.⁷ To thwart the stigma associated with COVID-19, WHO has suggested creating an environment where open discussion between HCPs and the general public can take place. In the meantime, it is imperative to disseminate accurate information and put emphasis on providing comprehensive support to the frontline HCPs to protect their mental wellbeing and allow them to continue practising their services effectively.