### Letters to the Editor

# Interrogation of the safety and efficacy of home-use light-based devices

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Linked Article: Pacifico et al. Br J Dermatol 2020; 183:375–376.

DEAR EDITOR, We read with interest the short paper describing the continued use of phototherapy in COVID-19-affected patients in Italy,<sup>1</sup> and commend the authors on sharing their experience. Phototherapy is undoubtedly a long-established, relatively safe means of reducing the burden of inflammatory skin disease, avoiding large doses of immunosuppression. Home phototherapy devices and services have a longestablished use in many countries throughout the world, as described in previous issues of this journal.<sup>2–4</sup> Dermatologists have previously expressed concern regarding the safety, need for training and medicolegal liability of home-use devices.<sup>4</sup>

The COVID-19 outbreak and ongoing calls for social distancing have led to reduced hospital attendances, which will accelerate the demand for home-use phototherapy devices, both those advocated by dermatology departments and those marketed and purchasable over the internet and without prescription. The dermatological community's efforts should be refocused on validating the safety and effectiveness of all home-use phototherapy devices for all indications, advocating safe and effective practices and not supporting those lacking a sufficient evidence base. Similar efforts and studies should also be applied to other home-delivered laser and light-based devices, including low-level laser therapy for alopecia and home laser hair removal devices.<sup>5</sup>

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# Further evidence that chilblains are a cutaneous manifestation of COVID-19 infection

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DEAR EDITOR, A range of cutaneous conditions including chilblain-like lesions have been reported in patients with coronavirus 2019 (COVID-19), caused by severe acute respiratory syndrome coronavirus 2 (SARS-Cov-2). Using clinical data and images, the authors of a recent nationwide Spanish survey identified five clinical patterns that were associated with different patient demographics, onset (timing) and prognosis.<sup>1</sup> These include 'acral areas of erythema with vesicles or pustules (i.e. pseudo-chilblain),' which occurred in one-fifth (19%) of patients with COVID-19 disease.<sup>1</sup> Pseudo-chilblains affected younger patients and occurred later in the course of the disease, with a mean duration of 12.7 days.<sup>1</sup> Furthermore, pseudo-chilblains were associated with a less severe disease course, including need for intensive care admission and mortality. The lesions were not uncommonly painful (32%) or associated with pruritus (30%).<sup>1</sup> Against this background, our aim was to examine whether internet searches for chilblains have increased during the current COVID-19 pandemic.

Google Trends<sup>®</sup> allows analysis of the relative popularity of search trends over time and geographical location.<sup>2</sup> We examined the term 'chilblains' in the 'health' category to ascertain whether there were any obvious recurrent temporal search



**Figure 1** Chilblains in 2020 during COVID-19. Google Trends<sup>®</sup> data (5 May 2019 to 26 April 2020) for chilblains worldwide (a) and for the USA (b). Numbers on the *y*-axis represent the search interest relative to the highest point for the given region and time (*x*-axis), where 100 is the peak popularity for the term, and 0 indicates there is not enough data for the search term. (c, d) Examples of chilblains that occurred in early 2020 in children and adults, none of whom had a history of previous chilblain occurrence. The erythema and the vesicles and pustules may be clearly seen.

patterns worldwide and in the USA. We examined data over the past 12 months. These are freely available within the public domain and therefore ethical approval was not required.

There were clear trends ('spikes') in the relative popularity of searches for chilblains in early 2020 (Figure 1). Figure 1 also shows pictures of two individuals' chilblains of different severity that were observed in patients without previous chilblains during the COVID-19 pandemic.

Our data show a clear relative increase in internet searches relating to chilblains in early 2020 during the COVID-19 pandemic. There are a number of possible explanations. This could include true chilblain-like lesions secondary to COVID-19 infection. Another explanation is that patients have used internet-based information to learn about chilblains following interaction with media content describing chilblain-like lesions in patients with COVID-19.<sup>3</sup> Finally, temporally these are unlikely to represent recurrence of chilblains provoked by cold weather (similarly to worsening of Raynaud phenomenon in colder weather).4 For example, in the previously described Spanish study, pseudo-chilblains occurred in a period of warm weather, and virtually all patients (70 of 71) did not have a previous history of chilblains.<sup>1</sup> There is also a tentative emerging suggestion that children are disproportionately affected by chilblains, potentially due to more mild disease.

In conclusion, our data further suggest that chilblain-like lesions might occur in COVID-19 infection. Further research is needed to confirm the potential clinical utility of chilblain lesions in COVID-19, including to facilitate disease suspicion and prognostication.

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### Obituary

### Obituary: Professor Ronald Marks, 1935–2020

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'Ronnie' took home at least three packed briefcases every evening, and if you met him leaving his office it was your task to carry them to his car. Ronald Marks was a giant of late 20th century dermatology, who created a major new centre of academic dermatology in Cardiff. He strode across the continents, stimulating and stirring in his quest to change and develop dermatology and to inspire researchers, students and the next generation of dermatologists.

Ronnie was generous, compelling, argumentative, great fun, infuriating and excellent company, while also being a great leader and pioneer. His driving workaholic personality was behind his hugely creative contributions across a wide academic and clinical spectrum. And his stimulating company dominated and enlivened every social gathering. People admired Ronnie, appreciated him for his unique personality, and were able to see and experience his endearing great warmth and kindness emerging from his complex personality.

When Ronnie asked you to do something, it was extremely difficult to refuse, but mostly you wanted to do it because he was brimming over with original, interesting and sometimes fun ideas and projects. He was inspiring, and through his cajoling and pushing, he brought out the best in people and Funding sources: none.

Conflicts of interest: the authors declare they have no conflicts of interest.

showed them that their potential to achieve was much greater than they had imagined.

Ronnie was born of Jewish parents in 1935 in London, lived in Maida Vale and went to Marylebone Grammar School. He was always close to his sister Ruth, who died in 1985. A scholarship to Guy's Hospital Medical School to study medicine was followed by 5 years in the army including 2 years in Munster, West Germany. He gained much dermatology experience in the army but his formal training was at St George's Hospital in London, at St John's Institute of Dermatology, and during 2 years at the University of Miami, which he loved and where he maintained an academic appointment. This led to his first consultant post at St John's, the traditional centre of British dermatology. His early work included describing tinea incognito<sup>1</sup> and inventing with Rodney Dawber the skin surface biopsy using cyanoacrylate glue.<sup>2</sup> Millions of glass slides have been stuck to volunteers since.

In 1973 he was appointed to the first academic dermatology position at the Welsh National School of Medicine, a gleaming new campus in Cardiff. His ambition was to create a leading academic unit, free from the restrictions he perceived in London. He was outstandingly successful.<sup>3,4</sup>

Ronnie wanted dermatology to become a science; he realized a critical first step was to be able to measure skin.<sup>5</sup> He created a laboratory with a keen imaginative team who developed novel ways to measure physical properties of skin, including transepidermal water loss, skin surface profilometry and ultrasound.<sup>6,7</sup> A huge industry has now arisen on the shoulders of this pioneering work. His research team included a large series of PhD students who went on to become leaders in their fields in the UK, Japan, the Middle East and India. His academic focus also included epidermal cell kinetics, the stratum corneum and skin pathology.

To further his ambition to make Cardiff 'the centre of world dermatology', Ronnie and his loyal colleague Joy Hayes organized major international meetings. These covered the ichthyoses,<sup>8</sup> acne and rosacea, the epidermis, investigative techniques, skin therapy and more. The world's most renowned dermatologists, including Albert Kligman,<sup>9</sup> Bernie Ackerman, John Strauss, Bill Eaglstein, Gerd Plewig and John Saurat could not resist Ronnie's invitations to contribute.