and one-third (33.9%) were 'not confident' or 'not at all confident' in managing skin conditions in patients with SOC (Fig. 1c). Lack of exposure to patients with SOC was cited by 60.7% of participants as the biggest challenge to looking after these patients (Fig. 1d), which was not an unexpected finding, as 67.9% of respondents estimated that < 5% of their patients had SOC. Specific conditions that were noted to be difficult to diagnose or manage included (i) inflammatory dermatoses (n = 29) such as atopic dermatitis and lupus, (ii) pigmentary disorders (n = 16) such as melanocytic naevi and vitiligo, and (iii) keloid scarring (n = 4). Suggested solutions to improving knowledge included dedicated study days, online resources, cultural training and dedicated teaching clinics.

This study shows that Irish dermatologists have low confidence in diagnosing and managing conditions in people with SOC. This is consistent with a previous study showing that only 56% of Australian dermatologists were confident in diagnosing and 75% confident in managing common dermatoses in patients with SOC.[2] This discrepancy in confidence between skin types is important as patients with more darkly pigmented skin are more likely to have negative outcomes from dermatological disease, including melanoma.[3] It has recently been shown that white skin is over-represented in images of COVID-19-associated eruptions.[4] With growing awareness of racial equity in medicine,[5] efforts are being made to increase the availability of clinical images highlighting the appearance of dermatoses in SOC. Resources to improve education in SOC include the Skin Diversity Subcommittee of the British Association of Dermatologists, and the associations Skin Deep (https://dftbskindeep.com/) and Skin of Color Society (https://skinofcolorsociety.org/).

In conclusion, Irish dermatologists have low confidence with skin pathology in SOC, and specific training could reduce this disparity.

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Allergic and cutaneous reactions following inactivated SARS-CoV-2 vaccine (CoronaVac®) in healthcare workers

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Dear Editor,

The vaccination programme against COVID-19 was started in Turkey following agreement of the Turkish Ministry of Health on the supply of the inactivated SARS-CoV-2 vaccine (CoronaVac®) by Sinovac Life Sciences (Beijing, China). We undertook a multicentre cross-sectional study of all healthcare workers who had received this vaccine between 15 January and 15 March 2021.

A questionnaire was sent by email to 250 vaccinated healthcare workers in four hospitals in Turkey. The participants were asked to report any allergic and/or cutaneous reactions they noted within minutes to a few days after the first dose of inactivated SARS-CoV-2 vaccine (CoronaVac), and whether they had received any treatment for the reactions.

Of the 250 vaccinated healthcare workers, 221 [110 men (49.8%), mean age 37.03 ± 13.83; 111 women (50.2%), mean age 38.56 ± 13.29] responded to the questionnaire. Of these 221 responders, 62 (28.1%) reported allergic/cutaneous reactions (injection-site pain and/or inflammatory reactions).

Of the 62 patients with cutaneous reactions, 25 (11.3%) of the cohort had no personal history of allergy or any personal or family history of COVID-19, while the remaining 37 did.

The 25 patients without relevant personal/family history reported the following reactions (some patients had > 1 reaction): urticaria (n = 12, 5.4%) (Fig. 1a); papulosquamous reactions [i.e. pityriasis rosea (PR)-like] (n = 8; 3.6%) (Fig. 1b); herpes infection (n = 4; 1.8%) consisting of herpes zoster (HZ) (n = 2) and herpes simplex (HS) (n = 2); angio-oedema (n = 3; 1.4%), Type IV hypersensitivity reactions such as erythema multiforme, lichenoid drug eruption and drug hypersensitivity syndrome (n = 3; 1.4%); palmar erythema (n = 2; 0.9%) (Fig. 1c); anaphylaxis (n = 1; 0.5%); conjunctivitis (n = 1; 0.5%); and small vessel vasculitis (n = 1; 0.5%) (Fig. 1d).

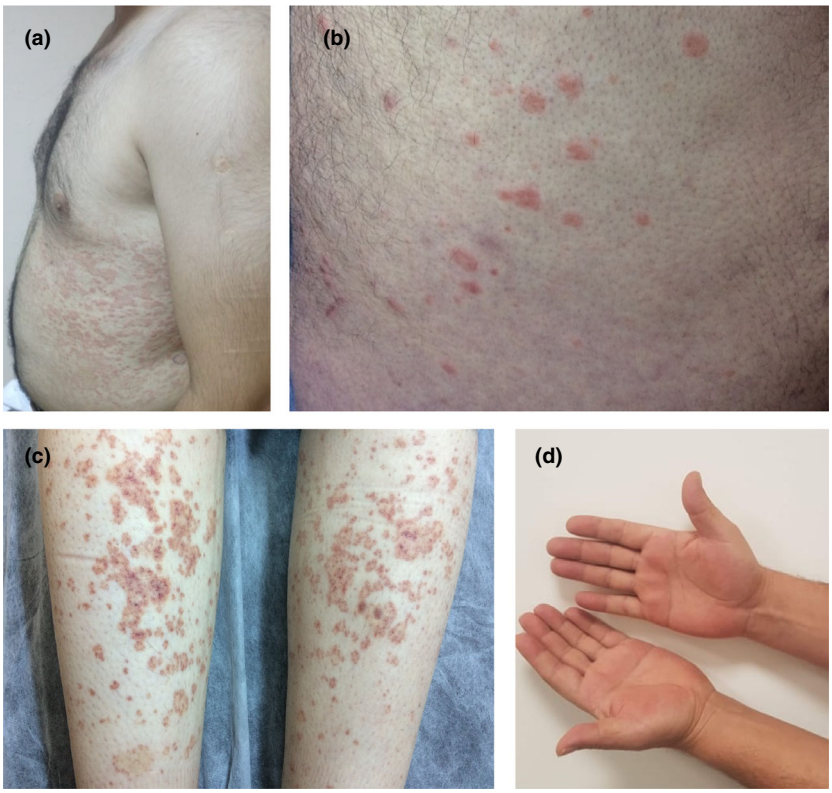

Figure 1 (a) Urticaria-like lesions on the flanks; (b) pityriasis rosea-like lesions on the trunk; (c) bilateral palmar erythema; (d) small vessel vasculitis on the extensor surface of the leg.

Of the 37 patients with relevant personal/family history, 36 had a personal history of allergy, of whom 13 (36.1%) developed cutaneous reactions following vaccination, particularly urticaria ($n = 10$), which was significantly ($P < 0.001$) more common than other reactions. Eight responders (7.2%; all women) reported exacerbation of their pre-existing chronic atopic condition, which was controlled with short-course systemic therapies.

Additionally, 21 responders had a personal history of COVID-19-related skin findings, of whom 12 (57.1%) developed skin rash after vaccination, mostly urticaria ($n = 6$) ($P < 0.001$), and 17 responders reported having relatives with COVID-19-related skin findings. Of these 17 responders, 10 developed skin rash after vaccination; 3 of these had urticaria ($P < 0.001$). Interestingly, constitutional symptoms occurring after vaccination were reported by 77 responders (34.8%) (Table 1).

Most of these reactions were improved without treatment within a few weeks of onset. Data on the safety, tolerability and immunogenicity of the inactivated SARS-CoV-2 vaccine (Coronavac) in healthy adults aged ≥ 60 years have been reported in the literature,[1] stating that the Coronavac vaccine is safe and well-tolerated in older adults. Adverse reactions were observed within 28 days of either the first or second dose of the vaccine with no significant cutaneous reactions. In our study, we noted that urticaria was the most frequently observed cutaneous reaction. Injection-site pain, cutaneous reactions and constitutional symptoms related to the vaccine were observed mainly in female participants, which might be related to their immunological background.[2] We also noted, in addition to development of PR, cases with reactivation of HS and HZ, supporting a causal link between the SARS-CoV-2 vaccine and herpesvirus reactivation.[3]

Based on our observations, this inactivated SARS-CoV-2 vaccine was safe in terms of cutaneous and allergic reactions, except for one case of anaphylaxis. Although most of the reported reactions were transient in nature, reports of any reactions following SARS-CoV-2 vaccination may open a new horizon for case-selected vaccines and precisely reach the clinical significance of these reactions. Further studies are warranted to answer the question of whether all or some of these reactions are markers of the degree of vaccine efficiency. Finally, physicians should be aware that SARS-CoV-2 vaccines have been approved for emergency use in the pandemic and long-term efficacy and the related adverse effects are not yet fully clear.

Table 1 Cutaneous and systemic reactions secondary to inactivated SARS-CoV-2 vaccine in healthcare workers who had received the first dose of the vaccine.

Vaccine-induced reactions	Patients		
	Male (N = 110), n (%)	Female (N = 111), n (%)	P
Skin findings	6 (5.5)	19 (17.1)	< 0.01
Flare-up of chronic skin diseases	0 (0.0)	8 (7.2)	< 0.01
Injection-site pain	20 (18.2)	42 (37.8)	0.001
Urticaria	2 (1.8)	10 (9.0)	0.02
Herpes reactivation	1 (0.9)	3 (2.7)	0.62
Angio-oedema	0 (0.0)	3 (2.7)	0.25
Type IV allergic cutaneous rash	0 (0.0)	3 (2.7)	0.25
Papulosquamous/ pityriasiform lesions	2 (1.8)	6 (5.4)	0.28
Anaphylaxis	0 (0.0)	1 (0.9)	1.00
Conjunctivitis	1 (0.9)	0 (0.0)	0.50
Vasculitic lesions	0 (0.0)	1 (0.9)	1.00
Palmar erythema	0 (0.0)	2 (1.8)	0.50
Systemic findings	32 (29.1)	45 (40.5)	0.07
Headache	25 (22.7)	28 (25.2)	0.66
Fever	0 (0.0)	6 (5.4)	0.03
Nausea. vomiting or diarrhoea	1 (0.9)	8 (8.1)	0.02
Fatigue/muscle pain/ joint pain	8 (7.3)	34 (30.6)	< 0.001
Loss of taste or smell	1 (0.9)	2 (1.8)	1.00

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Prepubertal pattern hair loss

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Dear Editor,

Barth *et al.*[1] originally proposed the term 'prepubertal hypertrichosis' to denote a relatively common condition of androgen-independent generalized terminal hair hypertrichosis with prepubertal onset and absence of endocrinological abnormalities. The importance of the observation was founded in the fact that the condition had previously been frequently confused in the literature with other causes of hypertrichosis, particularly hypertrichosis lanuginosa and hirsutism. In analogy to the introduction by Barth *et al.* of the term 'prepubertal hypertrichosis' into the dermatological nomenclature for clarification, we propose using the term 'prepubertal pattern hair loss' for the type of hair loss described in this report and by previous authors.

Tosti *et al.*[2] originally reported on 20 children aged < 10 years with thinning of the hair and widening of the central parting of the scalp, consistent with the pattern of androgenetic alopecia (AGA) of the female pattern hair loss (FPHL) type. All of the children had normal physical development.

Gonzales *et al.*[3] identified AGA as the most common form of hair loss in 57 adolescent patients with an average age of 14.8 years seen at an academic dermatology practice at New York University over a 12-year period. Laboratory evaluation revealed polycystic ovarian syndrome (PCOS) in three girls and late-onset congenital adrenal hyperplasia in one boy. The patterns of hair loss, either FPHL or male PHL (MPHL), varied depending on sex, patient age and associated endocrinological abnormalities.

Finally, Griggs *et al.*[4] performed a literature review of AGA in the paediatric/adolescent population published up to December 2018, and found a total of 655 cases.

To date, the condition has been associated with a strong family history of AGA. In view of its uncertain pathogenesis, Tosti *et al.*, Gonzales *et al.* and Griggs *et al.* have recommended endocrine evaluation and strict follow-up.[2-4]

The major shortcoming of the previous reports, with the exception of the Tosti *et al.*[2] case series, has been a failure to delineate the study population as either