Shortly after the first pandemic, all health care professionals were urged to shift their activity to telemedicine, which has become a cornerstone for continuity of care.[6,7] Consultations were less likely to be cancelled. Moreover, a balance was made between medical attention to COVID patients and regular attention to other patients. Contrary to the persistence of a general decline in skin cancer diagnoses during the second wave,[6,8,9] SC diagnosis through TD showed no decrease compared to 2019.

Since TD has already shown efficacy in diagnosis and management of SC,[10,11] it is important for physicians to scale the use of TD in order to prevent unnecessary in-person visits and help schedule specific appointments for vulnerable patients. Prompting doctors to use TD for SC diagnosis and SC pathway organization would prevent increased morbidity, mortality and health care costs.

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None declared.

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SARS-CoV-2 mRNA booster vaccine-associated lichenoid drug eruption

Editor

A 53-year-old otherwise healthy gentleman was referred for a dermatological opinion in view of a 2 day history of rapidly progressive, centrally eroded, erythematous, annular plaques involving the malar cheeks, eyelids and lips (Fig. 1a). The exanthem was mildly pruritic and associated with periorbital oedema (Fig. 1b). The facial lesions were accompanied by a single, discoid patch exhibiting central duskiness on the left shoulder (Fig. 1c). The trunk, oral and genital mucosae were otherwise completely spared and the patient was systemically well and cardiovascularly stable. The patient had received the booster (third) Pfizer-BioNTech (Pfizer, Inc., New York City, NY, USA) SARS-CoV-2 mRNA vaccine 3 days prior to the cutaneous eruption. The patient was administered the first and second COVID-19 vaccinations (both Pfizer-BioNTech-CoV-2 mRNA) 6 months before, 3 weeks apart. He had not experienced any cutaneous (or systemic) reactions to the first two doses.

Given the recent history of vaccination and the clinical presentation, an incipient severe cutaneous adverse reaction (SCAR) and erythema multiforme major were considered as the main differential diagnoses. The patient was prescribed prednisolone 0.5 mg/kg/day and lubricant ophthalmic drops (after review by an ophthalmologist). Serological testing, including a complete blood count with differential, biochemical profiling as well as Herpes Simplex PCR and *Mycoplasma* IgG and IgM were unremarkable.

An incisional biopsy taken from the lesion on the shoulder revealed a perivascular and interstitial lymphohistiocytic inflammatory infiltrate in the upper dermis, which also featured occasional eosinophils (Fig. 2). Endothelial swelling was appreciated

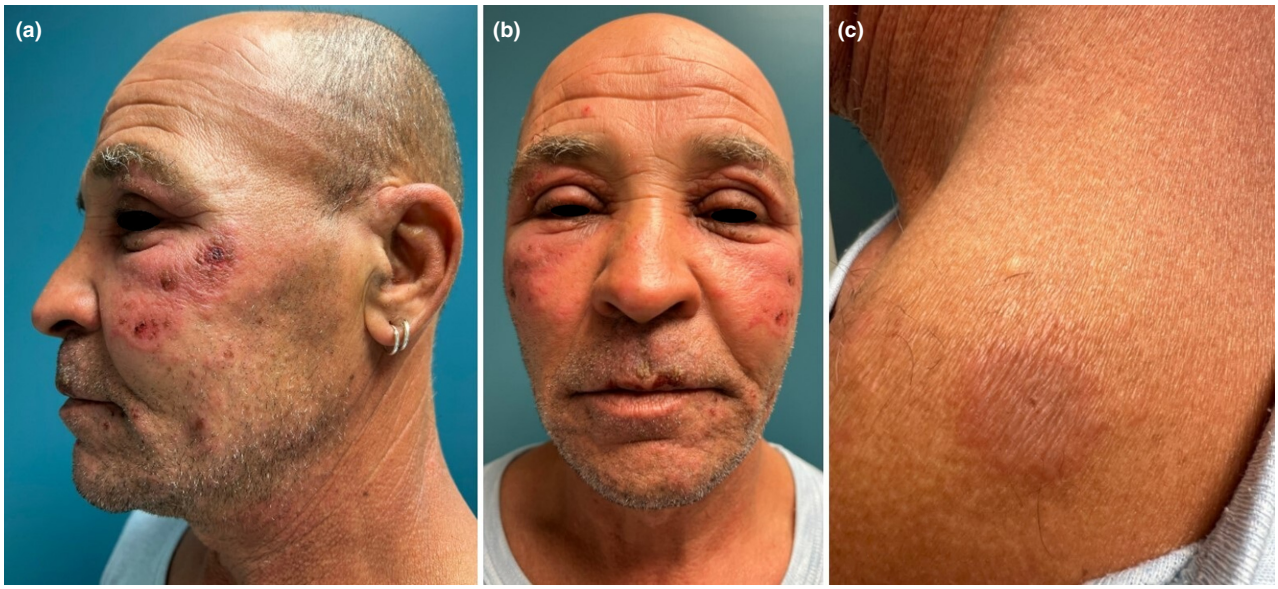

Figure 1 (a) annular erythematous plaques on the malar cheek with central erosions associated with (b) periorbital oedema. (c) A single, erythematous discoid patch with central duskiness on the patient's left shoulder.

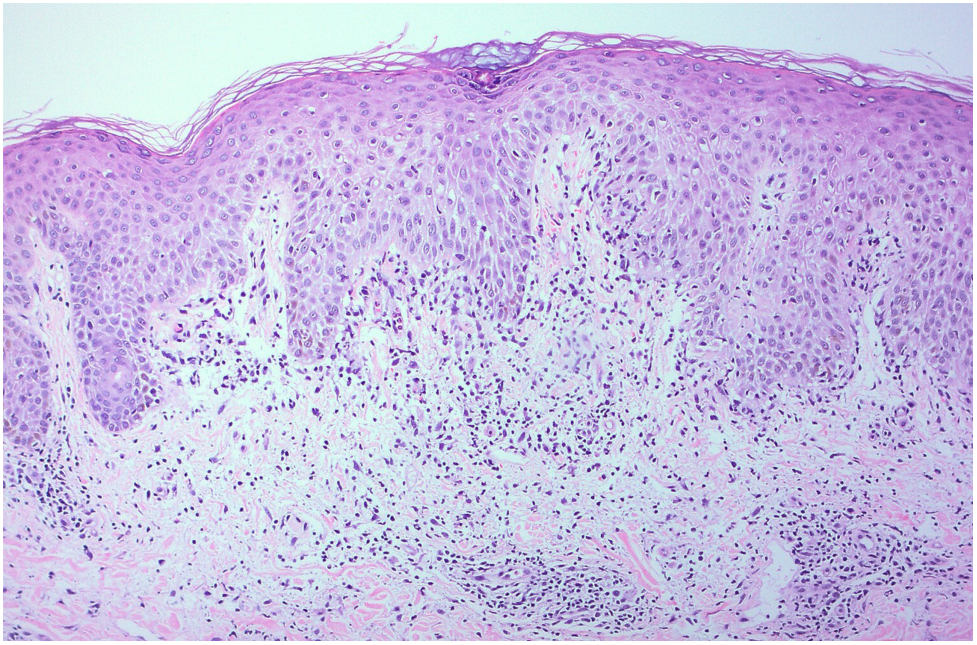

Figure 2 Histology from incisional biopsy left shoulder. Sections show a perivascular and interstitial lymphohistiocytic inflammatory infiltrate in the upper dermis, which also features occasional eosinophils. Endothelial swelling, lymphocytic infiltration and basal cell vascular damage is appreciated however there was no evidence of vasculitis. Pigment incontinence is focally identified. Occasional Civatte bodies are seen confined to the basal layer. The epidermis is variably acanthotic, focally spongiotic and parakeratinised in places.

however there was no convincing evidence of vasculitis. Lymphocytic infiltration of the basal layer of the epidermis with basal cell vascular damage was appreciated and pigment incontinence was focally identified. Civatte bodies were somewhat difficult to identify but, where present, were predominantly suprabasally located. Civatte body formation did not extend into the more

superficial layers of the epidermis. The epidermis was variably acanthotic, focally spongiotic and parakeratinised in places. A Periodic acid-Schiff stain for fungal hyphae was negative.

The overall findings were those of a lichenoid dermatitis. The paucity of the civatte bodies in this case argued against a diagnosis of erythema multiforme. On review 1 week after the initial consultation, the exanthem had significantly improved. The dose of oral steroids was tapered off by 5 mg every 3 days. The exanthem had completely resolved 2 weeks after oral corticosteroids were initiated.

Vaccination-associated lichenoid drug eruption (LDE) is most widely associated with the Hepatitis B, influenza and herpes zoster vaccine with patients experiencing the adverse reaction being significantly older than patients with other reported ADRS (mean = 47 years).[1] LDE has been documented in the context of Oxford-AstraZeneca,[2] Moderna[3] and also Pfizer-BioNTech[4] COVID-19 vaccine. This report however is the first to document LDE to a "booster" dose of the COVID-19 vaccination schedule. The effectiveness of the booster (third) dose of Pfizer-BioNTech-CoV-2 mRNA vaccine is established.[5] A recent review of booster COVID-19 mRNA vaccine adverse event reporting system (VAERS) looking at 39286 reports processed between September 22, 2021 and February 6, 2022 (in patients older than 18 years) found that 92.4% of VAERS were non serious (most commonly headache, fever and pain).[6] 64.3% of 332 588 patients who received the Pfizer-BioNTech booster vaccine reported an injection site reaction. No specific cutaneous ADR was reported.[6]

The patient in this case sustained a cutaneous ADR to the booster dose of the COVID-19 mRNA vaccine. The case highlights the importance of thorough drug history taking in patients presenting with cutaneous eruptions, histopathological correlation as well as for the need of appropriate documentation and adverse drug event reporting. In the setting of the COVID-19 pandemic, dermatologists may play a vital role in establishing reactions to COVID-19 booster vaccination (which may require the need for diagnostic "challenging") especially when considering the restricted freedom of movement of individuals who are not fully vaccinated.

Acknowledgement

The patient gave written informed consent for the publication of his case details as well as clinical photography.

Conflicts of interest

Dr Mintoff, Dr Pisani, Dr Livori, Dr Said Huntingford and Dr Baldacchino have no conflicts to declare.

Data availability statement

The data that support the findings of this manuscript are available from the corresponding author, DM, upon reasonable request.

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Cutaneous adverse effects of the available COVID-19 vaccines in India: a questionnaire-based study

Editor

Coronavirus disease (COVID-19) is a newly discovered highly communicable disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and its variants.[1]

We report diversified cutaneous side effects of the COVID-19 vaccines to describe various patterns and to understand temporal relationship between the first and second doses with cutaneous complications like local site reaction, defined as a wheal occurring at the site of immunization within 3 days from the day of immunization; delayed large local reaction, defined as wheal occurring 4 or more days post-immunization, depending on timing; and urticaria, defined as wheals distributed beyond the site of injection. Pain other than at the site of injection was defined as somatic pain in the peripheral region 2 cm away from injection site.

From 16 January 2021 to 16 August 2021, single or more cutaneous reactions to Covishield or Covaxin COVID-19 vaccines were studied in 1029 healthcare workers, which was first target population in vaccination drive, immunized at institutional

