irrespective of manufacturing technology. In our opinion, psoriasis patients should be advised to be vaccinated against SARS-CoV-2 and contact their healthcare provider in case they notice a flare of their disease.

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Conflicts of interest

None to declare.

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Erythema gyratum repens after COVID-19

Editor

Erythema gyratum repens (EGR) is considered a paraneoplastic syndrome characterized by the eruption of expanding, concentric, erythematous patches and plaques.[1,2] The reaction primarily affects older individuals and has a strong association with internal malignancy; such an association presents in approximately 82% of cases.[1–3] The most commonly associated malignancy is lung cancer, followed by oesophageal and breast cancer.[3]

The exact mechanism by which EGR develops is currently unknown.[4,5] Rongioletti *et al* evaluated 112 original cases of EGR from the literature.[1] Among these, 70% were associated with an underlying neoplasm, 30% were non-paraneoplastic, and 29 cases have been considered as different dermatoses mimicking EGR ('EGR-like' eruption).[1]

In this article, we report the first case of a patient with EGR after COVID-19.

An 83-year-old White man presented with a 3-day history of a rash affecting the abdomen and lower limbs (Fig. 1). The rash was described as red, burning, itchy and painful. On examination, distinctive serpiginous scaling patches with wood-grained appearance were noted on the thighs and trunk. Dermoscopy of the plaques revealed erythematous background with purplish tinge in a linear pattern (Fig. 2). He reported no known allergies and denied recent irritation or substance exposure to the affected area. Treatment included daily over-the-counter hydrocortisone cream but failed to provide symptomatic relief.

Two weeks before, he had experienced persistent dry cough, overall fatigue, myalgia, muscle weakness, headache and fever with accompanying dysgeusia and anosmia lasting several days. At that time, reverse transcription–polymerase chain reaction (RT-PCR) by nasopharyngeal swab testing was performed yielding positive result for SARS-CoV-2 and confirming COVID-19.

There was no significant lymphadenopathy. Systemic examination was within normal limits. Routine investigations including complete blood picture, chest and skull skiagram were unremarkable. All other blood parameters including blood culture, serology for antinuclear antibody, syphilis and infections due to hepatitis B, C and A viruses and HIV detected no abnormality. Chest radiography and computerized tomogram of the thorax were normal. The lactic dehydrogenase level was normal. Histological examination of a skin biopsy showed a mild superficial perivascular dermatitis with focal spongiosis (Fig 2).

The patient totally recovered from dry cough, fatigue, myalgia and muscle weakness after 10 days with complete resolution of the EGR manifestations (Fig. 1).

The clinical appearance of EGR is quite unique, often described as an extensive eruption of concentric erythematous coils arranged in parallel across the body.[3,4] It should also be noted that the associated lesions are not static in appearance.[2] As observed in our patient, the eruption can migrate through the affected area but tends to spare the hands, feet and face and is invariably pruritic.

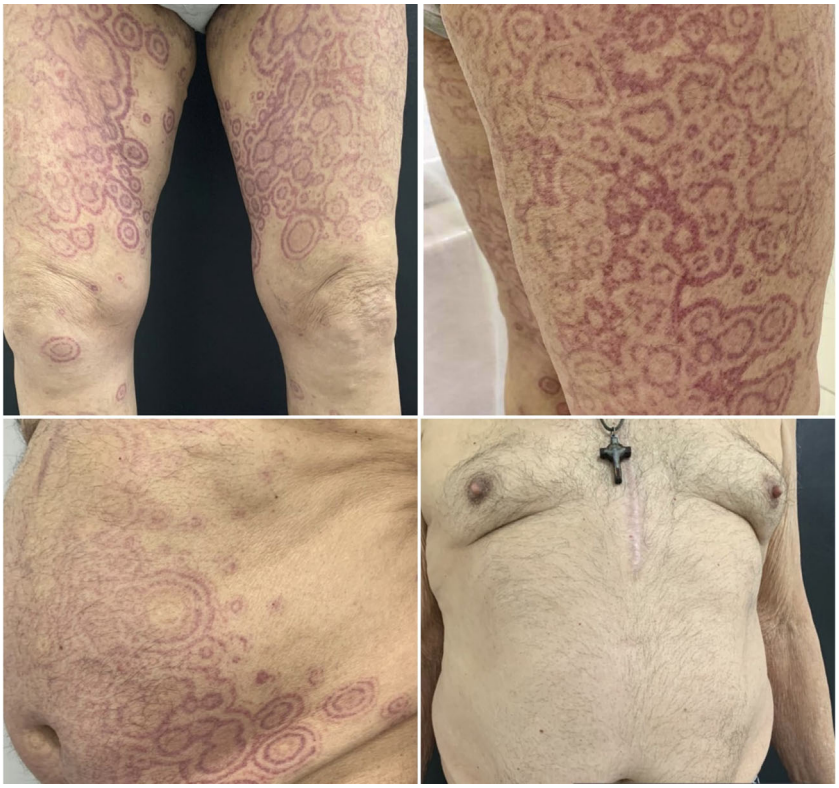

Figure 1 Erythema gyratum repens with extensive concentric erythematous coils arranged in parallel across the abdomen and thighs. Complete resolution of the EGR lesions after 2 weeks (right lower image).

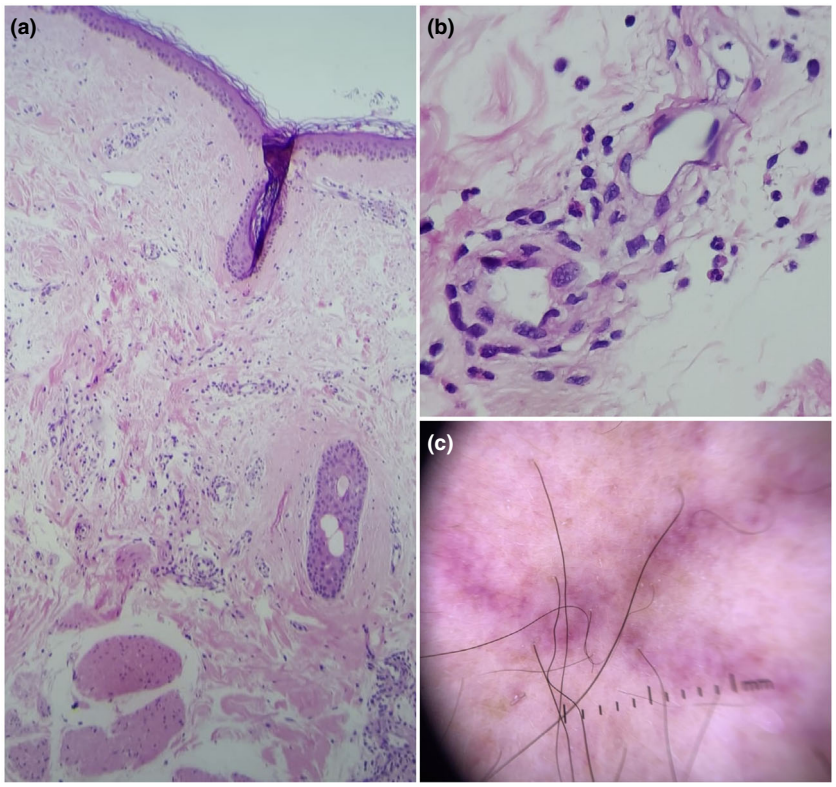

Figure 2 Erythema gyratum repens – (a, b) Histological examination with mild hyperkeratosis, focal spongiosis and mixed perivascular inflammatory infiltrate in the upper dermis (H&E). (c) Dermoscopy revealed erythematous background with purplish tinge in a linear pattern. Image taken with polarized light. (Original magnification: ×10).

Due to our knowledge, this is the first case of EGR related to COVID-19. The compelling clinical manifestation of EGR in our patient was directly related to the SARS-CoV-2 infection and totally disappeared just after the resolution of the case. No signs of any underlying malignancies were detected.

In our opinion, EGR should no longer be considered as an obligate paraneoplastic syndrome as the cases not associated with neoplasm are clearly not so uncommon.[1] In addition to searching an underlying neoplasm, clinicians should be aware of the possibility of other associations.[1] COVID-19 should be considered in patients with EGR as an underlying cause of the disease.

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Cutaneous reactions following CoronaVac COVID-19 vaccination: a case series of six healthcare workers from a single centre

The significant impact of the COVID-19 pandemic on public health, the economy and society required rapid action and the development of vaccines in an unprecedented time frame. While traditional vaccine development may take 15 years or more, vaccine development for SARS-CoV-2 has been reduced to 12-18 months with an accelerated timeline.[1]

Phase 1/2 clinical trials of the inactivated vaccine candidate CoronaVac COVID-19 vaccine showed that this vaccine is safe and tolerable, and phase 3 clinical trials were conducted in Brazil, Turkey and Indonesia.[2] Announced emergency use authorization for CoronaVac on 13 January 2021 in Turkey.[3] Vaccination was initiated primarily in healthcare workers and higher risk groups. The vaccine was given in two doses (days 0 and 28).

Here, we present a case series of 6 patients who developed a cutaneous reaction after CoronaVac COVID-19 vaccination of healthcare workers from a single centre. The demographic data of the patients and the clinical course of the cutaneous reactions are detailed in Table 1.

One patient developed a maculopapular rash one week after the initial vaccination and resolved spontaneously within one week. One day after the second vaccination, the rashes recurred with atypical targetoid lesions, more extensive skin involvement and an erythematous patch on the upper palate. Histological examination revealed interface dermatitis (Figure 1a–c). There was initial concern about possible progression to Steven Johnson syndrome, and however, as there was no further mucosal involvement or skin necrolysis, the final diagnosis was erythema multiforme major, and she had good clinical recovery with systemic corticosteroid.

One patient developed erythematous scaly papules located along the skin cleavage lines with two plaques resembling the herald patch on the trunk 4 days after the first dose of vaccine (Figure 1d). The morphological appearance of the lesions and histopathological findings were consistent with classical pityriasis rosea. The rashes faded within three weeks, but reactivated 4 days after the second vaccination, and all lesions resolved completely within 8 weeks.

Three patients presented with symptoms of urticaria after the first vaccination and one patient after the second vaccination (Figure 1e). None of the 4 patients had a prior history of urticaria. Three of the patients were subsequently diagnosed with chronic urticaria as symptoms had persisted for more than 6 weeks.