The occurrence of EN after vaccination is rare, but has been reported in the literature after vaccination for hepatitis B, human papillomavirus, cholera, malaria, rabies, small pox, tuberculosis, typhoid and Tdap. The pathogenesis of EN secondary to vaccinations is unclear, but a reaction to antigens of the infectious agent, or a hypersensitivity reaction to components of the vaccine, has been hypothesized.8

To our knowledge, this is the first report of EN occurring after vaccination with ChAdOx1 nCoV-19 vaccine and should be investigated whether the immune response to the vaccine could trigger the onset of this cutaneous manifestation, as it has been suspected after COVID-19 infection; recognition of emerging skin reactions to vaccines by physicians, in particular dermatologists, is fundamental for patient adherence to COVID-19 vaccination and therefore for the success of the vaccination strategy.

Acknowledgements
The patients in this manuscript have given written informed consent to the publication of their case details.

Conflict of interest
The authors declare that they have no competing financial interests or other potential conflict of interests.

Funding sources
No funding sources were used for this article.

Data availability statement
The data that support the findings of this study are available from the corresponding author upon reasonable request.

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DOI: 10.1111/jdv.17762

Regression of common viral warts after ChAdOx1-S COVID-19 vaccine

Editor
A 28-year-old woman (phototype III), with hypothyroidism (treated by levothyroxine 50 µg), presented to a dermatology outpatient clinic due to viral warts (Fig. 1a). The first lesion appeared two years before on the right thumb. Since that time, the patient has tried self-treatment methods including mechanical removal of hyperkeratotic masses and over-the-counter freezing spray, with further appearance of new lesions.

In March 2021, the lesions became painful, which made the patient to visit a dermatologist. In the period when she was awaiting a medical consultation, she got two doses of vaccination against COVID-19 (ChAdOx1-S). At the turn of March and April 2021, after the first vaccine dose, the patient experienced increased hair loss, which lasted till the end of May 2021. After receiving the second vaccine dose, hair loss episode reoccurred, with even higher intensity, due to that 2 weeks after the second vaccination dose, the patient started taking biotin. Additionally 3 weeks after vaccination and the week after she started taking biotin, the changes in viral warts were observed including severe pain associated with crust formation, which preceded their clinical resolution. Approximately 4 weeks after the second vaccine dose, all viral warts disappeared completely.

Besides skin lesions associated with COVID-19 infection, there is growing evidence on the relation between COVID-19 vaccine and its cutaneous adverse effects.1 There have been reports on local site reactions, urticaria, morbilliform rash, pernio, pityriasis rosea, erythema multiforme, erythromelalgia, lichen planus, varicella-zoster and herpes simplex reactivation, which occurred after the vaccination.2

Despite viral warts may affect 7%–12% of the general population, we are unaware of any previous reports concerning their
regression after COVID-19 vaccine. In contrast, the association between clinical course of HPV infection and host immunity is well-documented.

Recently, Erkayman et al. reported a case of regression of multiple, treatment-resistant viral warts, which regressed during COVID-19 infection and reoccurred three months later. Saadeh et al. postulated that regression could be triggered by systemic activation of plasmacytoid dendritic cells during SARS-CoV-2 infection and associated with type I interferon production.

The possible connection between COVID-19 vaccine and clinical resolution of viral warts is interesting, as some vaccines (mumps, measles, rubella vaccine; Bacillus Calmette–Guérin vaccine) are already applied intralesionally in the treatment of viral warts. The studies evaluating cytokine profile in warts treated with this method showed an important role of IL-10 downregulation and upregulation of IL-1 and IFN-γ. Additionally, there have been case reports showing clinical resolution of viral warts after systemic administration of quadrivalent HPV vaccine.

Based on the patient’s medical history data, we have also searched the available literature for the role of biotin in the pathogenesis of viral warts, but found no evidence of its possible role in the regression of the lesions.

As in some cases viral warts may resolve spontaneously, we could not exclude this scenario in the presented case; thus, future observations are needed to confirm the hypothesis on wart regression after COVID-19 vaccine.

Acknowledgement
The patient in this manuscript has given written informed consent to the publication of their case details.

Conflict of interest
None.

Figure 1  (a) Clinical presentation of viral warts after the second dose of COVID-19 vaccine, during crust formation. (b) Condition at about 4 months after vaccination against COVID-19.

Funding sources
None.

Data availability statement
Data are available on request from the authors.

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Impact of the French COVID-19 pandemic lockdown on newly diagnosed melanoma delay and severity

Editor

The COVID-19 pandemic has had a profound impact on the healthcare system worldwide, which led to a decrease in the number of melanoma diagnosis, but the consequences of lockdown on newly diagnosed melanomas’ severity have not been widely reported. We aimed to evaluate how the first lockdown in France impacted the incidence and prognostic characteristics of new melanomas, in our skin cancer centre in the Parisian region, highly affected by the pandemic. We conducted a retrospective study including all new diagnosed melanoma referred to our centre, divided into 4 periods: P1 = 2020 lockdown period (17/03-12/05/2020), P2 = 2020 post-lockdown period (13/05-31/10/2020), P3 = 2019 equivalent lockdown period (17/03-12/05/2019), P4 = 2019 equivalent post-lockdown period (13/05-31/10/2019). We evaluated the differences in American Joint Committee on Cancer (AJCC) staging, Breslow index, ulceration and lymph node (LN) involvement, using logistical regression models, adjusted according to age, gender, performance status, lifestyle, phototype and tumour-infiltrating lymphocytes. Statistical tests were two-sided and \( p \)-values < 5.0% was considered statistically significant. We included 493 consecutive new melanoma cases, with no difference in baseline patient characteristics.

Figure 1  Cumulative numbers of new melanoma cases in 2019 and 2020

DOI: 10.1111/jdv.17771