# Scabies revisited in the COVID-19 era

### Dear Editor,

Scabies is commonly noted to be localized on the wrists, skin folds, hands, feet and genitalia. Atypical localization of lesions, such as those observed in the crusted scabies, has only been reported on the scalp in immunocompromised patients or on the face in infants.<sup>1</sup> We describe a case of scabies localized on the face and on the typical areas in an immunocompetent adult patient.

A 76-year-old woman was evaluated in our department for itchy and excoriated lesions that appeared on the trunk, limbs and face. In anamnesis, the patient reported that her son contracted scabies several months earlier while in the hospital. A physical examination revealed excoriated papular lesions localized on the face, trunk and limbs (Fig. 1a). Manual dermoscopic examination showed burrows in these areas, and examination of scales confirmed the presence of *Sarcoptes scabiei* mites (Fig. 1b) not only on the trunk and limbs, but also on the face, particularly on the cheeks covered by the anti-COVID mask. The diagnosis of scabies was made, and a therapy with permethrin 5% cream was immediately started and repeated after 8 days. While the lesions on the body were resolved, those on the face persisted 15 days after the first treatment; hence, a cycle of benzoate benzyl benzoate 25% cream was started. The patient achieved a complete recovery after this second treatment.

According to the literature, in the last 2 years, the percentage of patients positive for scabies has increased in Italy,<sup>2</sup> in Europe<sup>3</sup> and worldwide<sup>4</sup> and it is estimated to affect more than 130 million people globally.<sup>5</sup> New scabies outbreaks were especially reported in hospitals, probably due to long shifts and high bed turnover in COVID wards, and inside the household, probably due to the close contacts with relatives and cohabitants caused by the 'stay-at-home' policy.<sup>3</sup> In these new conditions, the body care and personal hygiene practices have changed and a correct clean-up of the environment is now more difficult to manage than in the past because people are forced for long hours in their houses while working from home.<sup>2</sup>

During the period of confinement, the duration of symptoms reported by patients was significantly longer due to reinfestation, resulting from incomplete treatments for scabies and fear of leaving the household and accessing the hospital.<sup>3</sup>

This is the first case of scabies disseminated to the body and face in an immunocompetent patient. In the literature, mites are known to be reported on non-hairy skin and areas of low sebum production. However, during the pandemic period, the prolonged use of the COVID mask may have favoured the development of lesions on the face for prolonged skin contact with the mite-contaminated mask. In addition, the mask likely creates a favourable microenvironment for mite reproduction.



**Figure 1** Clinical and dermoscopic features. Excoriated papular lesions localized on the face (inset a). Burrows in a papular lesion of the face (inset b).

This case teaches us that, nowadays, a patient infected with scabies should be evaluated not only on the typical but also on the atypical areas, such as the face, to make a complete evaluation of the illness and effectively treat all the areas affected. At the moment, there are no specific therapies available for the atypical areas. We suggest using a first topical treatment such as permethrin 5% cream, potentially followed by a second topical treatment including permethrin 5% cream or benzyl benzoate ointment 20%. These applications, especially on the face, cause frequent irritation, so a systemic treatment with ivermectin should be considered in case of failure of these topical therapies. In addition, in our experience, scabies localized on the face showed a greater resistance than those localized on the body. Hence, the patient requires a close follow-up after the conclusion of the treatment.

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## **Conflict of interest**

None declared.

#### **Data availability statement**

Data sharing is not applicable to this article as no datasets were generated or analysed in this study.

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#### References

- Paller AS. Scabies in infants and small children. Semin Dermatol 1993; 12: 3–8.
- 2 De Lucia M, Potestio L, Costanzo L, Fabbrocini G, Gallo L. Scabies outbreak during COVID-19: an Italian experience. *Int J Dermatol* 2021; 60: 1307–1308.
- 3 Martínez-Pallás I, Aldea-Manrique B, Ramírez-Lluch M, Manuel Vinuesa-Hernando J, Ara-Martín M. Scabies outbreak during home confinement due to the SARS-CoV-2 pandemic. *J Eur Acad Dermatol Venereol* 2020; 34: e781–e783.
- 4 Kutlu Ö, Aktaş H. The explosion in scabies cases during COVID-19 pandemic. *Dermatol Ther* 2020; **33**: e13662.
- 5 Thompson MJ, Engelman D, Gholam K, Fuller LC, Steer AC. Systematic review of the diagnosis of scabies in therapeutic trials. *Clin Exp Dermatol* 2017; 42: 481–487.

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