that clinicians might consider the diagnosis of *Pityrosporum* folliculitis in patients presenting a monomorphic eruption of erythematous follicular papules and pustules, especially on the trunk, following the use of systemic corticosteroids and broad-spectrum antibiotics for severe COVID-19 ARDS.

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Conflict of interest

I hereby declare that the manuscript authors have no conflicts of interest.

Data Availability Statement

Data are openly available in a public repository that issues datasets with DOIs.

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Concomitant SARS-CoV-2 infection and crusted scabies in a 4-month infant

To the Editor,

Crusted scabies (CS) is a severe form of scabies caused by hyperinfestation of mites in the horny layer of the epidermis that thickens and forms warty crusts.[1] Although it has been described mainly in immunosuppressed individuals, it has been also observed in otherwise healthy patients.[1] We are living the coronavirus disease 2019 (COVID-19) outbreak, that is, a mild/moderate disease in children.[2–4] However, SARS-CoV-2 infection may induce significant changes in the host's immune response.[5,6]

We described a 4-month-old male infant with concomitant CS and SARS-CoV-2 infection. He was admitted to our Paediatric COVID Unit because of SARS-CoV-2 positivity. Both parents were already SARS-CoV-2 positive. Infant's past medical history was unremarkable until the onset of a rash at the age of 2 months. Diagnosis of atopic dermatitis was made and topical hydrocortisone and oral antihistaminics were prescribed for 1 month. Because of the lack of improvement, he received oral betamethasone (10 days) and then a hydrolysed milk, with again no improvement. At hospital admission, he presented inappetence and extreme irritability, with lesions affecting the whole body surface, including scalp, with red papules, excoriation, erythrodermia, nail dystrophy and fissures in soles and palms (Fig. 1a). He was off therapy since about 2 weeks. During the hospital stay, mother revealed an erythematous papular eruption with scratching and excoriations on arms and abdomen. She reported similar lesions in infant's grandmother lasting 3 months.

This history and the characteristics of lesions drew our attention to a possible skin infestation. Dermoscopy of skin scrapings of the infant revealed numerous scabies mites and eggs, confirmed by optical microscopic examination of scraped scales. A diagnosis of CS was made, while mother received diagnosis of ordinary scabies. Laboratory investigation revealed a severe hypereosinophilia (Fig. 1c) and high serum IgE (2592 IU/mL, normal reference value <15). Screening for immunodeficiency was negative. Lymphocyte subset panel showed a slightly low NK cells (5%, normal value 7–13). The infant was treated with oral antihistamine, topical permethrin 5% and urea 5% on hyperkeratotic palmoplantar surfaces for 1 week, with no clinical and laboratory response. An off-label treatment with oral ivermectin (200 μg/kg/dose twice a day, at days 1 and 8) was started. An improvement was observed after the third dose of ivermectin, with a complete resolution of lesions and normalization of blood test within 2 weeks (Fig. 1b,c). No recurrence of scabies or atopic dermatitis was observed during the 4-month post-discharge follow-up. As for family members, mother

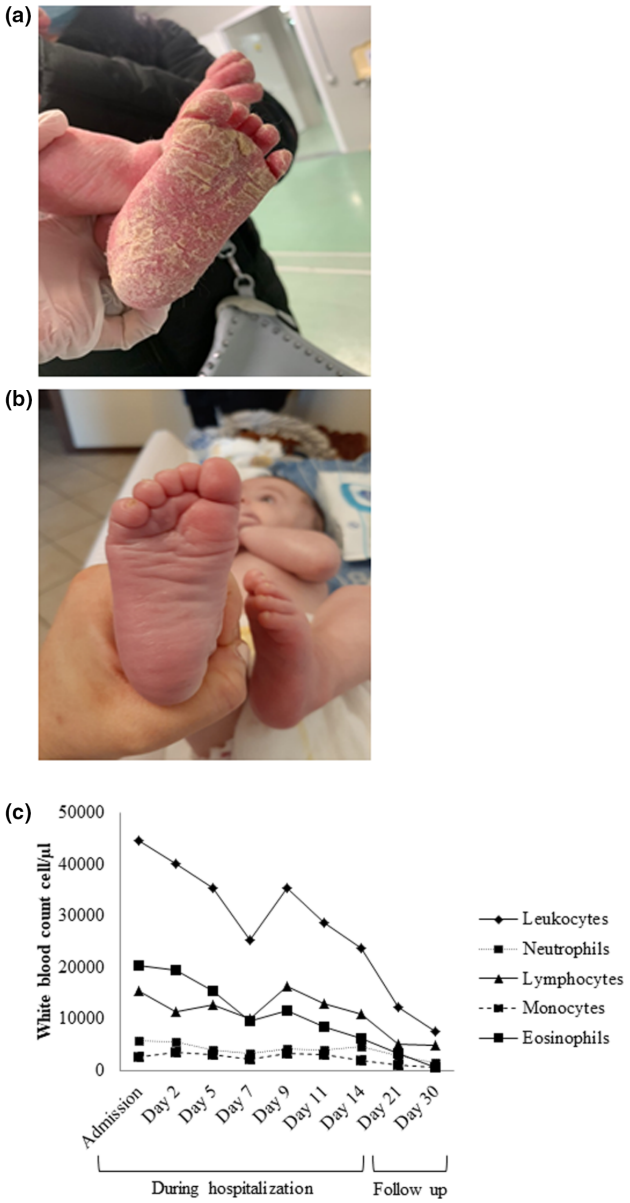

Figure 1 (a) Hyperkeratotic whitish crusts with crackings on the plantar surfaces, with fissures in soles. (b) Complete resolution of cutaneous lesions during the post-discharge follow-up. (c) Laboratory investigation during the observation.

received first topical permethrin with a hypersensitivity reaction and subsequent crotamiton, with no response. A treatment with ivermectin (2 days) obtained a complete resolution of clinical picture. Father received preventive treatment with permethrin at home.

The severe crusted phenotype in our case might have several explanations. Firstly, the absence of skin scraping reaction due to the very young age of the patient; second, the iatrogenic immune suppression due to the prolonged use of corticosteroids; third, a possible immunosuppression due to SARS-CoV-2 infection.[5,6] As for laboratory investigation, it has been described an aberrant proliferative responses of peripheral blood mononuclear cells in CS compared to healthy controls and ordinary scabies.[1] A very high eosinophil count in our case may be due to the prolonged use of steroids, an immature immune system typical of young infants[7] and an impaired immune response due to the concurrent SARS-CoV-2 infection. As for treatment, oral ivermectin is reserved for recurrent, difficult-to-treat cases, or CS.[8] Due to severe presentation and to the refractoriness of the condition with topical treatment, our patient required this off-label treatment. An antiviral effect on SARS-CoV-2 replication in the early stages of infection has been also hypothesized for ivermectin. However, current evidence on efficacy of ivermectin in COVID-19 are insufficient.[9] We can hypothesize that ivermectin did not affect the course of COVID-19 in our patient, also because when he received ivermectin, he was already SARS-CoV-2 positive for at least 1 week. This case underlines that an early diagnosis and a prompt treatment of CS are mandatory in order to prevent superinfection, sepsis and clinical deterioration.

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Conflict of interest

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Author contribution

All persons designated as authors are qualify for authorship and all those who qualify have been listed. A. Giannattasio: contributed to concept and design the study, drafted the article and reviewed the final version; M. Rosa: acquired and analysed data and contributed to interpretation of results; S. Esposito: acquired and analysed data, and drafted the manuscript; O. Di Mita: acquired and analysed data, and drafted the manuscript; F. Angrisani: contributed to design the study and drafted the article; S. Acierno: contributed to design the study and drafted the article; C. D'Anna: collected data and analysed results, F. Barbato: contributed to design the study and critically revised the article; V. Tipo: contributed to design the study and critically revised the article; O. Ametrano: contributed to design the study and revise it critically for intellectual content. All listed Authors approved the final version of the article.

Disclosure

This manuscript nor one with substantially similar content under our authorships has been published or is being considered

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Data availability statement

All data are available (by contacting the Corresponding Author).

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Trend of sexually transmitted infections during the Covid-19 age. What was the impact of the pandemic and the social distancing measures?

Editor

Covid-19 pandemic has led to social distancing guidelines and resource allocation with subsequent impairment of sexual health services. The impact of such measures and the recommendations regarding changes of sexual behaviour is a matter of debate.[1–3] Published reports have shown conflicting results. Balestri *et al*.[4] suggested that the incidence of STI in 2020 was comparable to 2019. Bonato *et al*.[5] reported no differences in the syphilis cases with previous years, while Cusini *et al*.[6] reported a reduction in non-acute cases of STI and Latini *et al*.[7] showed a reduction in STI diagnoses.

For this reason, we have analysed the trends of seven sexually transmitted microorganisms in 5809 patients (4911 females and 898 males) from June 2014 to December 2020. Cervical swabs (4495), vaginal swabs (270), seminal fluids (584), gland swabs (39), urethral swabs (476), endometrial fluids (1565), oral swabs (26) and anal swabs (79) were analysed. In case of multiple different samples collected from the same patient in the same date, the results were pooled as a single one. In case of repetition of the testing procedure in other dates, the results were removed by a 2-year filter.

DNA was extracted by MagNa Pure Compact System (Roche Diagnostics GmbH, Mannheim, Germany). DNA amplification was performed by AnyplexTM II, STI-7 Detection Kit (Seegene, Inc. Seoul, Korea). The study was approved by the Ethical Committee of Policlinico of Bari.

The analysis of the yearly positivity rates was performed by either Poisson or Quasipoisson regression model. The *P*-values of the models were corrected by Benjamini and Hochberg's procedure. Plots were created by the package ggplot2 implemented in R and the calculations of all statistical tests were performed by the open-source environment R 4.0.3.[8] P-values < 0.05 were considered statistically significant.

The number of patients remained stable until 2018 and then decreased from 2019 (884) to 2020 (616). The percentage of female (84.86% in 2020 vs. 83.77% in 2014–2019) and male (16.23% in 2020 vs. 15.14% in 2014–2019) patients remained stable in 2020 when compared to the previous years (Chi-Squared P-value = 0.511). A slight increase of the median age of the patients (36.00 [Interquartile Range, IQR: 31.00–42.00] in 2020 vs. 35.00 [IQR: 30.00–41.00] in 2014–2019) has been also observed (Wilcoxon test P-value = 0.010). The prevalence rates for each microorganism were not statistically different in the year 2020 and the years 2014–2019 (Table 1). Some statistically significant differences between females and males have been also detected, but the effect size is likely negligible because of the small values of the Cramer's V. UP accounted for the most prevalent microorganism both in females and males followed by UU and MH.

The results of the models to evaluate the yearly trends for each microorganism are reported in Fig. 1. After Benjamini and Hochberg's correction, the only *P*-values of the UP model were statistically significant. In particular, the UP positivity rates varied in a quite complex way increasing from 2014 to a maximum value in 2017 followed by a decreasing trend.