

The Ugly Face of Face Masks

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ABSTRACT

Introduction: Prolonged and tightly use of face masks has been identified as cause for skin damage during the COVID-19 pandemic. **Case series presentation:** We evaluated patients seen in the outpatient clinic between March and May 2020, during the lockdown period, focusing on skin damage related to the use of face masks. We aimed to highlight the major impact of routine usage of face masks on the skin of individuals of different ages and professions. Contact dermatitis was prevalent, but we also recorded many cases of outbreak of seborrheic dermatitis, acne, rosacea, perioral dermatitis, atopic dermatitis, folliculitis, as well as neurotic excoriations caused by anxiety, tinea, and impetigo. We also observed a delay in the diagnosis of benign and malignant tumors. **Conclusions:** The most important step should be the assessment of dermatologic pathology related to the use of face masks. They say a picture is worth a thousand words. So take off the face mask, and look at the skin!

Keywords: face mask, COVID-19, pandemic, skin damage

INTRODUCTION

Prolonged and tightly use of face masks has been identified as cause for skin damage during the COVID-19 pandemic, many papers describing allergic and contact dermatitis, urticaria, xerosis, and exacerbation of preexisting skin diseases.¹ Furthermore, it has been stated that there is also a pandemic of dermatitis caused by personal protective equipment, especially face masks.²

CASE SERIES PRESENTATION

We evaluated patients seen in outpatient conditions between March and May 2020, during the lockdown period for the SARS-CoV-2 pandemic, focusing on skin damage related to the use of face masks. Our aim was to highlight the major impact of routine usage of face masks on the skin of individuals of different

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FIGURE 1. **Case 1:** Irritant contact dermatitis in a young nurse, with no history of skin disorders and no allergic background; patch test proved to be negative to standard battery and to textile series, formaldehyde, and thiuram, she has been working in an intensive care unit using FFP1-type masks; systemic antihistamines and emollients showed slight improvement (**A, B**). **Case 2:** Allergic contact dermatitis in a middle-aged woman, non-healthcare worker, who was seen in the emergency department for a bacterial impetiginized eczema of the left side of the face and neck; she was initially treated with systemic antibiotics (amoxicillin 2 g/day for 7 days) and potent topical steroids; she admitted prolonged use of a cloth homemade mask and denied any other morbidities or drug intake; she was sent to the allergy department and tested; the results showed positivity to formaldehyde; she was advised to change the type of face mask to single-use surgical mask (**C**). **Cases 3–6:** Flare-up of preexisting skin diseases: seborrheic dermatitis in a 67-year-old male patient (**D**), pustular rosacea in a 56-year-old nurse (**E**), acne in a teenager (**F**), perioral dermatitis in a 23-year-old student (**G**) and a 34-year-old physician (**H**), all very anxious about the burst of “silent” skin disorders. **Case 7:** Neurotic excoriations were frequently diagnosed, especially in women, with self-inflicted lesions on the face when the mask was taken off and anxiety was at high levels; psychiatric examination was required to each case (**I**). **Case 8:** Humidity and friction were in favor of developing a fungus infection on the face, in a field laborer working in the midday wearing a paper face mask; direct mycological examination was positive (**J**). **Cases 9–10:** Due to lockdown and privation of medical access many severe cases of basal cell carcinoma (BCCs) were covered by face masks in a 67-year-old woman and a 43-year-old woman; the lesions were certainly present prior to the pandemic but were not so aggressive locally (**K, L**).

ages and professions. We found that contact dermatitis was prevalent, but we also recorded many cases of outbreak of seborrheic dermatitis, acne, rosacea, perioral dermatitis, atopic dermatitis, and folliculitis. Neurotic excoriations caused by anxiety (self-reported and certified by psychiatric evaluation) and delayed diagnosis of benign and malignant tumors, especially basal cell carcinoma, due to the lockdown, were present in high numbers.

Prolonged contact of facemasks and humidity, during summer days, were in favor of developing severe cases of tinea, especially in diabetic patients. Impetigo and simple pruritus sine material were also present, many patients complaining of diffuse itching without skin marks (Figure 1).

The current brief report was approved by the Ethics Committee of the Institution where it was conducted, and all study procedures and questioning were performed according to the Declaration of Helsinki. Informed consent for patient information and images to be published was obtained.

CONCLUSIONS

The most important step should be the assessment of dermatologic pathology related to the use of face masks. They say a picture is worth a thousand words. So take off the face mask, and look at the skin!

CONFLICT OF INTEREST

Nothing to declare.

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