Koebner Phenomenon Induced by Face Mask Ear Loops
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ABSTRACT
We present a case of Koebner phenomenon induced by friction due to tightness of ear loops attached to the face mask used as protective measure against spreading COVID-19 infection.

Keywords: Covid-19, facemask, contact, Koebner, psoriasis.

INTRODUCTION
Countless reports have been published about iatrogenic skin disorders among healthcare providers during COVID-19 pandemic infection. Besides cutaneous manifestations of COVID-19 infection, skin can be affected by the protective measures, especially among healthcare workers, raising the awareness of new types of occupational skin diseases.

Recently published reports have shown that prolonged use of face masks has been associated to skin dryness in 70.3% of health personnel and desquamation in 62.2%, especially on the nasal bridge (83%) (1).

After months of study, a statement has been released revealing that prolonged use of face masks and headgears can cause allergic contact dermatitis, irritant contact dermatitis, pressure urticarial, friction dermatitis and aggravation of pre-existing skin diseases (2).

The retro-auricular area is susceptible to mechanical pressure and friction caused by prolonged use of face masks, especially due to tightness of ear loops (3).

CASE PRESENTATION
A 45-year-old male healthcare worker in an Intensive Care Unit, who had received a two-year treatment with adalimumab for Crohn disease, presented with de novo bilateral erythematous scaly plaques, which were localized in the retro-auricular region, overlaying the area covered by ear loops (Figure 1).

Searching the patient’s medical data, no records of cutaneous psoriasis have been found, and clinical examination did not notice any other skin lesions. Mycological direct examination was nega-
Koebner phenomenon is known as a trigger factor in psoriasis. Recent explanations are centered on immune response, showing that scratch induce upregulation of CCL20, accumulation of IL-17-A producing cells and presence of CCR6 dendritic cells (5).

Paradoxical psoriasiform reaction, de novo psoriasis or exacerbation of pre-existing psoriasis during treatment with anti-tumor necrosis factor (TNF)-α drugs are already known to affect the balance between TNF-α and interferon. 

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REFERENCES


