COVID-19 and psoriasis: is it time to limit treatment with immunosuppressants? A call for action.

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Dear Editor,

the recent outbreak of coronavirus disease 19 (COVID-19), caused by the virus SARS-CoV-2, led to a series of containment and preventive measures to limit its spread. Most cases involve patients aged 30-80 years with low mortality in healthy individuals where the infection may have an asymptomatic/paucisymptomatic course, recovering from the disease without any special treatment. About 1/6 people with COVID-19 become seriously ill, developing life-threatening breathing difficulties with a mortality rate of about 2% (Wu, 2020)

The elderly and subjects with pre-existing diseases (diabetes, cardiovascular disease, cancer) are the most susceptible and may develop severe respiratory syndrome coronavirus (Wu, 2020). Currently, the COVID-19 rate risk in immunosuppressed is still largely unknown.

In past, cases of epidemic severe influenza viral infections have been described: Serrato et al reported a case of swine influenza A (H1N1) infection in a psoriatic patient on adalimumab (Serrato, 2013). Furthermore, Kling et al described a patient with psoriasis taking immunosuppressive drugs resulted positive for influenza A (H1N1) who, after an initially efalizumab therapy, was switched to infliximab for a severe psoriatic flare and died after her first infusion (Kling, 2010).

Based on previous cases of death or increased risk of infection from viral diseases in immunosuppressive patients, we would like to stress the importance of a therapeutic reassessment of all psoriatic patients, chronically treated with immunosuppressive drugs, that weaken the immune system and make them more susceptible to opportunistic infections. Cyclosporine (CsA), methotrexate (MTX) and anti-TNF-alpha are among the first-choice therapies for psoriatic patients with PASI>10, often prescribed to healthy young patients free from cardiovascular diseases and comorbidities (Maza, 2011).

Given the increased risk of opportunistic infections, we wonder whether this is the most appropriate time to start immunosuppressive therapy in patients with psoriasis. On the one hand we must consider that in patients with erythrodermic psoriasis or severe psoriatic arthritis immunosuppressive treatments are essential; on the other hand, we must not overlook the immunosuppressive effect of these drugs, which can presently increase the risk of infectious complications and promote the spreading of COVID-19 infection. Although the rapid effect of these drugs is well-demonstrated, it

should be considered that the psoriatic patients on CsA/MTX/anti-TNFa are partly immunodepressed with an increased risk of opportunistic infections and to date it is unknown whether there may be an increased risk of COVID-19 infection in these patients. Obviously, all patients should practice good hygiene and other measures to protect against infections.

While waiting for official and specific data concerning the risk of COVID-19 infection in patients treated with immunosuppressive drugs, we suggest that in areas of high infection rate or outbreaks the treatment with CsA/MTX/anti-TNFalfa should be carefully weighted because these drugs may cause decreased immune response and greater susceptibility to life-threatening infections; in this way it is extremely important to limit and/or reduce the time of administration, preferring topical and/or drugs with a lower impact on the immune system until certain data; we also suggest to stop all immunosuppressive and biological therapy where exposure to confirmed COVID-19 occurs, as recommended for other previous outbreaks (Shale, 2010).

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