

Correspondence

COVID-19: association with rapidly progressive forms of alopecia areata

Dear Editor,

Coronavirus disease 2019 (COVID-19) has been associated with exacerbation of underlying autoimmune diseases as well as triggering new conditions.^{1,2} Alopecia areata (AA) has been noted to flare in relationship to the infection or stress of quarantine and/or fear of infection.^{3,4} Three patients were seen in consultation with new onset AA in August 2020 with rapidly progressive disease after the pandemic started. All three were unresponsive to 1–2 months of topical, intralesional, and/or nutritional treatments. The index case developed alopecia universalis (AU) after recovery from documented COVID-19 infection, and two others developed rapid onset disease with no evidence of infection.

Case 1: The index case is a 56-year-old female paramedic who developed a “sinus infection” in early March 2020 and shortly thereafter noted hair loss, cough, and loss of taste and smell, but COVID-19 testing was not pursued because of fever <100 °F. Nasal PCR and serum IgG were both positive for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in late April and mid-May 2020, respectively. After recovery from COVID-19, hair loss progressed to >99% of all body hair.

Case 2: A 45-year-old woman with no significant medical history or risk factors developed rapid onset alopecia totalis (AT) after air travel mid-March 2020. She had no symptoms of prior viral infection, and SARS-CoV-2 antibody testing was negative.

Case 3: A 19-year-old male with a history of focal AA at age 9 developed rapidly progressive AT starting mid-July 2020. He was under home preventative quarantine from early March 2020 and had no COVID-19 risk factors but did report stress and anxiety related to this isolation. SARS-CoV-2 antibody testing was negative.

Stress is known to aggravate and possibly unmask autoimmune diseases, AA in particular.⁴ Cases 2 and 3 have no other risk factors, but stress related to the COVID-19 pandemic is

plausible. Case 1 had de novo AU coincident with COVID-19 infection. This suggests new onset AA forms may be another nonspecific cutaneous manifestation of SARS-CoV-2, joining urticaria, vesicular eruptions, and livedo reticularis⁵ as well as the growing list of autoimmune diseases associated with it. None of these can be clearly reported as cause and effect, but awareness of new onset AA, particularly extensive disease, should alert physicians to the possibility of recent COVID-19 infection and pursue appropriate testing. This may affect therapeutic decision making, as AA/AT/AU often require immunosuppressive therapies in their management, which would be contraindicated during active COVID-19 infection.

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