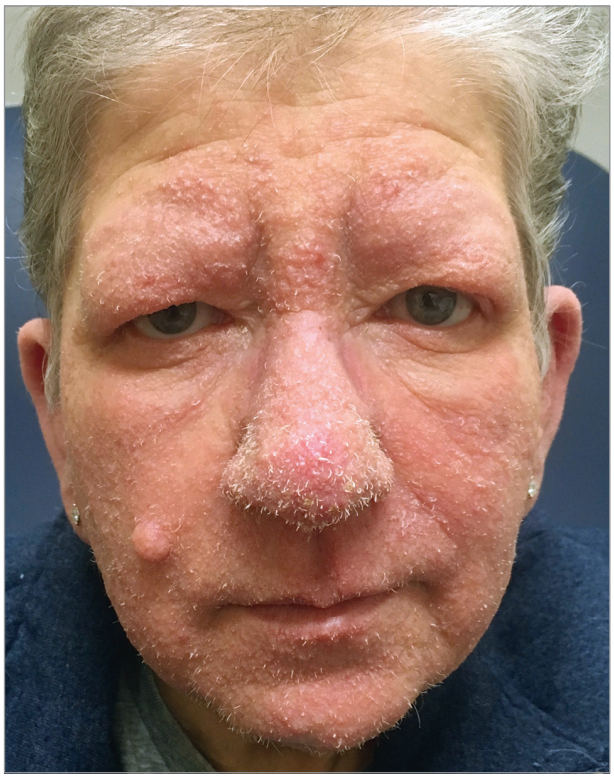
Images in Dermatology

Trichodysplasia Spinulosa in a Kidney Transplant Recipient

Anna Sonstegard, MD; Marc Grossman, MD; Amit Garg, MD

A kidney transplant recipient in her 60s (who was taking mycophenolate mofetil and belatacept) presented with a 1-year history of pruritic pink follicular papules with central white spicules on her face, ears, and extremities associated with eyebrow and eyelash alopecia (**Figure**). Skin biopsy results demonstrated distended hair follicles occluded by hyperkeratotic and parakeratotic debris. At the suprabulbar level, the outer root sheath had central plugging with enlarged intracytoplasmic trichohyaline granules diagnostic of trichodysplasia spinulosa (TS). Polymerase chain reaction confirmed the presence of TS polyoma virus.

Figure. Pink Follicular Papules With Central White Spicules



Treatment with compounded topical 1% cidofovir cream, applied twice daily, produced significant clinical improvement within 2 months of treatment that was maintained at 6-month and 1-year follow-up visits. Trichodysplasia spinulosa is a rare folliculocentric infection seen almost exclusively in patients with immunosuppression, including transplant recipients and patients with a hematologic malignancy.[1] In 2010, the TS human polyoma virus was identified by electron microscopy, sequenced, and named.[2] To our knowledge, only 30 cases of TS have been reported in association with iatrogenic immunosuppression.

Trichodysplasia spinulosa is characterized by numerous erythematous to skin-colored follicular papules with central white spicules distributed predominantly over the central face, often resulting in loss of the eyebrows and eyelashes. While the TS human polyoma virus has been identified in saliva, blood, and nasal swabs, the virus appears to primarily affect the skin, with unknown long-term consequences.[2] Trichodysplasia spinulosa can be diagnosed clinically. However, because the differential diagnosis is broad, a skin biopsy provides diagnostic confirmation. The differential diagnosis may include lichen spinulosus, multiple minute digitate hyperkeratosis, spiculate demodicosis, lichen planopilaris, keratosis pilaris, trichostasis spinulosa and the follicular spicules of multiple myeloma.

Treatments for TS include 1% to 3% topical cidofovir, oral valganciclovir, and a reduction of immunosuppression when clinically appropriate.[3] Given the risk of transplant rejection when reducing immunosuppression, as well as potential adverse effects of valganciclovir, including creatinine elevations and bone marrow suppression, topical cidofovir was chosen as the initial option. More recently, leflunomide has also been described as an oral treatment.[4] This patient highlights a rare condition that was effectively and safely treated with topical therapy.

ARTICLE INFORMATION

Author Affiliations: Donald and Barbara Zucker School of Medicine at Hofstra/Northwell, East Garden City, New York.

Corresponding Author: Anna Sonstegard, MD, 1991 Marcus Ave, Ste 300, Lake Success, NY 11042 (asonsteg@northwell.edu).

Published Online: November 4, 2020. doi:10.1001/jamadermatol.2020.3986

Conflict of Interest Disclosures: Dr Garg reported grant support from UCB, AbbVie, and the National Psoriasis Foundation and honoraria from Novartis, Amgen, Janssen, Boehringer Ingelheim, Incyte, Pfizer, AbbVie, UCB, and Asana Biosciences. No other disclosures were reported.

Additional Contributions: We thank the patient for granting permission to publish this information. We also thank Silvija Gottesman, MD, for her expert tissue interpretation, as well as Richard Wang, MD, for performing polymerase chain reaction testing.

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