Discussion | Demodex is the most common ectoparasite in humans. Sixty-five Demodex species have been described, with approximately 10 suggested to cause dermatoses in mammals. Two species of Demodex, Demodex folliculorum and Demodex brevis, are known to inhabit the pilosebaceous unit in humans. Clinically, human demodicism can resemble papulopustular rosacea, folliculitis, perioral dermatitis, acne, and other inflammatory dermatoses. Chen and Plewig propose primary and secondary forms of human demodicism with novel nomenclature to decode the often confusing terminology. Primary demodicism includes pityriasis folliculorum (spinulie demodicism), rosacea-like demodicism (papulopustular demodicism), perioral-periorbital-periauricular dermatitislike demodicism (perioral-periorbital-periauricular demodicosis), Demodex abscess-facial abscesslike conglomerates (nodulocystic-conglobate demodicism), ocular and auricular demodicism. Skin lesions in secondary demodicism occur in conjunction with systemic disease, particularly in immunocompromised patients.

Pityriasis folliculorum was first described by Ayers in 1930. The description was based on the cases of 11 women with chronic facial irritation characterized by slight erythema and follicular-based scale with a sandpaperlike texture of the skin associated with a burning sensation in the affected area. We propose a novel clinical variant of demodicism termed demodectic frost of the ear, which is most reminiscent of pityriasis folliculorum.

In our experience, patients with demodectic frost of the ear present with fine follicular scaling primarily confined to the helix and lobule, giving the skin a frosted or powdery appearance and sandpaperlike texture. There is a varying degree of auricular erythema in some patients. Infrequently, patients complain of auricular pruritus, pain, and discomfort. Findings from potassium hydroxide preparation of the scale are positive for Demodex mites. Demodectic frost of the ear is a distinct clinical entity from auricular demodicism, which was described based on a case report of Demodex-associated otitis externa and myringitis. A large majority of patients with demodectic frost of the ear are male. This finding is supported by a higher Demodex mite burden in male patients, likely due to an increased number of sebaceous glands.

Various therapeutic options exist for the treatment of human demodicism. Using standardized skin surface biopsies, Forton and colleagues assessed the acaricidal action of several topical therapies. Benzyl benzoate (not commercially available in the United States) was the most efficacious treatment compared with metronidazole, permethrin, sulfur compound, lindane, and crotamiton. Successful therapy with ivermectin has been reported and was an effective treatment for another patient in our clinic (unpublished data). Other therapies include oral metronidazole and topical camphor oil. In symptomatic patients with demodectic frost of the ear, we recommend selenium sulfide, 2.5%, lotion as a wash in addition to a low-potency topical corticosteroid. If compounding is available, a mixture of hydrocortisone ointment, 1%, salicylic acid, 2%, and precipitated sulfur, 3%, is preferable for optimal treatment.

Matthew M. Wallace, BSc
Darren J. Guffey, MD
Barbara B. Wilson, MD

Author Affiliations: Department of Dermatology, Virginia Commonwealth University, Richmond, Virginia (Wallace); Department of Dermatology, University of Virginia, Charlottesville, Virginia (Guffey, Wilson).

Corresponding Author: Matthew M. Wallace, BSc, Virginia Commonwealth University, Department of Dermatology, PO Box 980164, 401 N 11th St Nelson Clinic, 5th Floor, Ste 520, Richmond, VA 23219-0164 (wallacemm2@vcu.edu).

Published Online: December 28, 2016. doi:10.1001/jamadermatol.2016.4769

Conflict of Interest Disclosures: None reported.


CORRECTION

Incorrect Author Affiliation and Error in Abstract Results and Findings of Key Points: In the Original Investigation titled "Incidence of and Risk Factors for Skin Cancer in Organ Transplant Recipients in the United States," published online January 11, 2017, the institutional affiliation for Mr Allen F. Shih was incorrect; he is affiliated with Yale New Haven Hospital. There was also an error in the abstract results, as well as the Findings of the Key Points. The incidence ratio for posttransplant skin cancer overall was corrected to 1437 per 100,000 person-years, and the specific subtype rates for squamous cell carcinoma, malignant melanoma, and Merkel cell carcinoma were corrected to 812, 75, and 2 per 100,000 person-years, respectively. This article has been corrected online.