Dermatoscopy case of the month: Trichodysplasia spinulosa

Connor J. Stonesifer, BA,[a] Syed A. Husain, MD,[b] George W. Niedt, MD,[c] and Stephanie M. Gallitano, MD[c]
New York, New York

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CLINICAL PRESENTATION

A 52-year-old man with a history of renal transplantation 2 years prior presented with a 4-month history of brown-to-pink papules on the forehead, nose, and ears as well as follicular hyperkeratotic papules on the arms, legs, and trunk (Fig 1, *A* to *C*). He reported that his eyebrows and eyelashes began to thin when the papules first appeared.

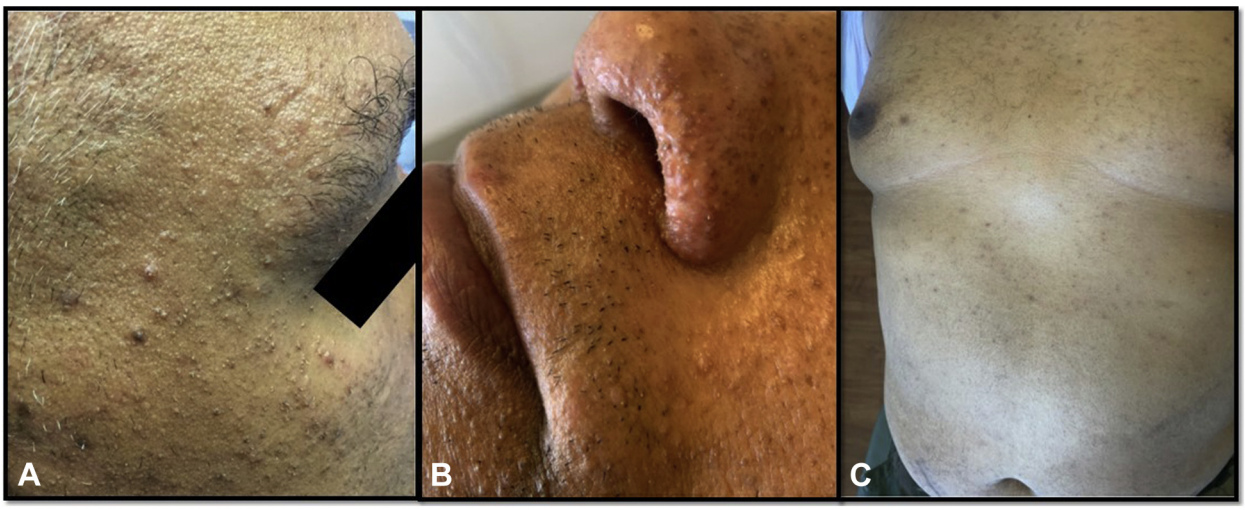

Fig 1. The patient presented with (**A**) numerous brown and pink papules on the face and ears with associated patchy loss of eyebrow hair. **B**, Lesions also involved the nasal ala. **C**, The patient developed follicular hyperkeratotic papules on the trunk at the same time as the development of the facial lesions.

From the Columbia University Vagelos College of Physicians and Surgeons, New York[a]; and Department of Nephrology,[b] and Department of Dermatology, Columbia University Irving Medical Center, New York.[c]

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Correspondence to: Stephanie M. Gallitano, MD, Department of Dermatology, Herbert Irving Pavilion, 12th Floor, 161 Fort Washington Avenue, New York, NY 10032. E-mail: sg3587@cumc.columbia.edu.

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DERMATOSCOPIC APPEARANCE

Dermatoscopy revealed perifollicular hyperpigmentation with central white circles and bright white spicules (Fig 2, *A* and *B*).

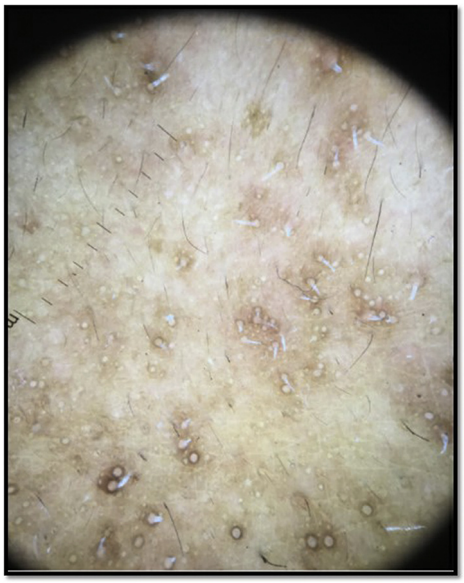

Fig 2. Dermatoscopic features including perifollicular hyperpigmentation with central white circles and bright white spicules.

HISTOLOGIC DIAGNOSIS

Histopathologic examination demonstrated a dilated hair follicle with keratin plugging and a marked increase in trichohyalin granules. There was a sparse superficial perivascular mononuclear cell infiltrate. A diagnosis of trichodysplasia spinulosa was made (Fig 3, *A* and *B*).

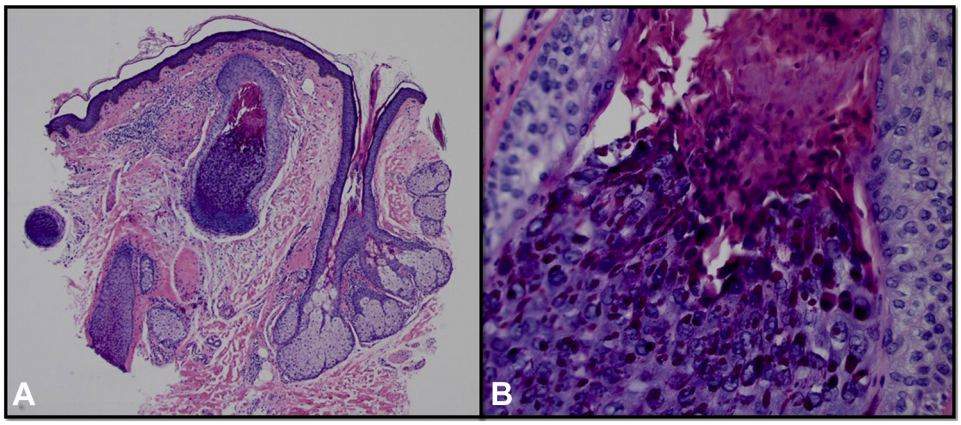

Fig 3. Histologic features at increasing magnification (original magnifications: **A**, ×20; **B**, ×400) showing a dilated hair follicle with a marked increase in trichohyalin granules.

KEY MESSAGE

Trichodysplasia spinulosa (TS) is a rare cutaneous eruption in immunosuppressed patients caused by TS-associated polyomavirus, which presents as folliculocentric papules with protruding keratin spicules, most frequently on the face and ears. Associated alopecia affecting the eyebrows is common.[1,2] Histologically, TS is characterized by dilated hair follicles with enlarged, eosinophilic trichohyalin granules and dystrophy of the inner root sheath epithelium with apoptotic follicular keratinocytes.[1,2]

Timely diagnosis of TS is crucial as it may progress to leonine facies if left untreated.[1,2] Dermatoscopic evaluation can aid in rendering a timely diagnosis. The most specific dermatoscopic clue for distinguishing TS from other hyperkeratotic follicular disorders is the presence of bright white spicules that protrude peripherally from follicular openings.[1,3] In contrast to the dark, confined keratin plugging seen in other hyperkeratotic disorders, it is both the stark whiteness of the spicules and their considerable length that are characteristic of TS.[1,3] TS in patients with skin of color may also present with perifollicular hyperpigmentation with a central white or pink circle. Treatment options include reduction of immunosuppression, topical cidofovir, or systemic valganciclovir, among other regimens.

Conflicts of interest

None disclosed.

REFERENCES

1. Curman P, Näsman A, Brauner H. Trichodysplasia spinulosa: a comprehensive review of the disease and its treatment. *J Eur Acad Dermatol Venereol*. 2021;35(5):1067-1076.
2. Narayanan D, Rady PL, Tyring SK. Recent developments in trichodysplasia spinulosa disease. *Transpl Infect Dis*. 2020;22(6): e13434.
3. Liew YCC, Kee TYS, Kwek JL, Tang PY, Oh CC. Photodynamic therapy for the treatment of trichodysplasia spinulosa in an Asian renal transplant recipient: A case report and review of literature. *JAAD Case Rep*. 2021;7:74-83.