

Treatment of Trichostasis Spinulosa with a Hydroactive Adhesive Pad

LTC Dirk M. Elston, MC, USA, Lackland Air Force Base, Texas

MAJ Leroy C. White, MC, USAF, Okinawa, Japan

Trichostasis spinulosa is a common skin condition that may be easier to diagnose than to treat. Successful treatment with the use of a hydroactive adhesive "deep cleaning" pad (Biore®) is discussed.

Trichostasis spinulosa can be challenging to treat. An ideal treatment should result in complete removal of the follicular spines with little irritation.

Case Report

A 40-year-old physician sought consultation for dark "blackheads" on his nose, which had been present since puberty. Examination revealed small, dark follicular spines, diagnostic for trichostasis spinulosa (Figure 1). The patient had tried a wide variety of topical acne treatments and various forms of mechanical removal without benefit. In addition, the patient's dark skin was prone to hyperpigmentation in areas of irritation or injury. The challenge was to offer a simple, effective therapy with a minimal risk of irritation, inflammation, and hyperpigmentation.

A "deep cleaning" pad (Biore®) with hydroactive adhesive was applied to wet clean skin for 10 minutes, then carefully peeled off. A single treatment resulted in the removal of about half of the follicular spines (Figure 2). Most removed spines appeared to be removed in their entirety (Figure 3). The patient experienced no discomfort, subsequent skin irritation, or hyperpigmentation. Microscopic examination of a removed spine demonstrated a closely packed bundle of pigmented telogen hairs, confirming the diagnosis (Figure 4).

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Dr. Elston is Chief, Dermatology Service, Brooke Army Medical Center, Fort Sam Houston, Texas. Dr. White is Flight Commander, Operational Medicine, Kadena Airbase, Okinawa, Japan.
REPRINT REQUESTS to Wilford Hall Medical Center, Dermatology/MMID, 2200 Bergquist Drive, Suite 1, Lackland Airforce Base, TX 78236-5300 (Dr. Elston).



FIGURE 1. Dark, follicular spines, characteristic of trichostasis spinulosa.



FIGURE 2. Improvement after a single treatment.

The patient continues to use the pads on a periodic basis with little irritation and excellent therapeutic results. He reports a high degree of satisfaction with the treatment regimen.

Comments

Trichostasis spinulosa typically occurs on the nose, although it may also occur on other skin sites and in



FIGURE 3. Follicular spines adherent to hydroactive pad.



FIGURE 4. Each spine is a bundle of telogen hairs.

association with seborrheic keratoses¹ and melanocytic nevi.² Trichostasis spinulosa may coexist with eruptive vellus hair cysts.³ It is also a frequent incidental finding in histopathologic specimens from the face. Physicians unfamiliar with the entity may misinterpret the follicular spines as lesions of comedonal acne.⁴ However, examination of a spine will reveal a bundle of small pigmented telogen hairs and establish the correct diagnosis.

Histologic examination of involved skin reveals an ectatic follicle with keratin debris and closely packed telogen hairs. Retention of hairs is likely the result of disordered keratinization, and although keratinolytics are commonly recommended to treat the condition, in our experience the results are generally disappointing. Topical tretinoin has been used with some success,⁵ although our experience is that therapeutic failures are common and skin irritation can occur. When significant irritation occurs, it may result in dyspigmentation, especially in darker-skinned individuals. Depilatory waxes have been reported as successful,⁶ but may be cumbersome to use. Because many depilatory waxes must be heated, patients using them should be careful to avoid thermal burns with resulting dyspigmentation.

Biore[®] pads contain a cationic (positively charged) hydrocolloid. The active agent, polyquaternium 37, binds selectively to comedonal plugs, which are rich in acidic amino acids and therefore carry a negative charge (F. Anthony Simon, PhD, Andrew Jergens Co., personal communication).

In our patient, Biore[®] pads proved to be a simple and effective treatment for trichostasis spinu-

losa. Our patient was extremely pleased with the results of treatment and experienced no adverse reactions. The pads should be applied to clean wet skin. Application times may vary, but the manufacturer recommends 10 to 15 minutes in a climate with average humidity. The pad is initially flexible, but becomes stiff when it is ready for removal. In dry climates, shorter application times are recommended. In darker-skinned individuals, who are at risk for hyperpigmentation in response to inflammation, shorter exposure times should be tried initially. Some individuals may experience some stripping of their stratum corneum with longer exposures, and inflammation with resulting dyspigmentation is a potential sequela.

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