

Gray-white discoloration of wart surface: An endpoint for multipuncture-assisted delivery of bleomycin



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THERAPEUTIC CHALLENGE

Bleomycin is an effective treatment option for common and palmoplantar warts and has been suggested for use in recalcitrant warts.¹ Various methods of drug delivery have been used—intralesional, multipuncture, or microneedling.²⁻⁴ Treatment outcomes with intralesional injection and the microneedling technique are comparable, and pain is lower with the latter, making it an advantageous alternative.¹⁻⁴ Transient pain, erythema, and eschar formation are common after the procedure, with local hyperpigmentation in dark skin the most common long-term adverse effect.^{1,2,4} Contraindications include bleomycin hypersensitivity, peripheral vascular disease, Raynaud phenomenon, and pregnancy.¹ Although the endpoint of intralesional injection is well defined (blanching of the lesion is considered adequate treatment), a similar defined endpoint is lacking for the multipuncture/microneedling methods.²⁻⁴

SOLUTION

After paring the verrucous surface (Fig 1), bleomycin solution (1U/mL) drops are placed on the surface of the wart with an insulin syringe. Using the 31-gauge needle of the same insulin syringe, multiple punctures are made on the wart surface. This process of adding bleomycin topically and puncturing the surface is repeated several times. A simple clue to determine the endpoint of topical bleomycin with multipuncture/microneedling is the appearance of a gray-white discoloration of the wart surface during the procedure (Fig 2). The



Fig 1. Multiple plantar warts with pared surface.

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Fig 2. Gray-white discoloration of the surface of warts after multipuncture delivery of bleomycin.

discoloration depicts blanching of the lesion (similar to that with intralesional injection) and appears only after adequate drug delivery has been achieved with the punctures. Because inadequate treatment can lead to recurrence or partial response (with a need for repeated sessions), a visual endpoint is offered as a solution.

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