

Pinto Bean Pressure Wraps: A Novel Approach to Treating Digital Warts

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Identifying an optimal treatment method for verruca vulgaris can be a frustrating challenge for clinicians. We describe the use of a pinto bean pressure wrap to induce ischemic change in digital warts. This novel technique provides a low-cost, low-risk, and nearly pain-free home-based treatment option with response rates similar to those of other commonly employed methods.

Practice Gap

Verruca vulgaris is a common dermatologic challenge due to its high prevalence and tendency to recur following routinely employed destructive modalities (eg, cryotherapy, electrosurgery), which can incur a considerable amount of pain and some risk for scarring.^{1,2} Other treatment methods for warts such as topical salicylic acid preparations, topical immunotherapy, or intralesional allergen injections often require multiple treatment sessions.^{3,4} Furthermore, the financial burden of traditional wart treatment can be substantial.⁴ Better techniques are needed to improve the clinician's approach to treating warts. We describe a home-based technique to treat common digital warts using pinto bean pressure wraps to induce ischemic changes in wart tissue with similar response rates to commonly used modalities.

Technique

Our technique utilizes a small, hard, convex object that is applied directly over the digital wart. A simple self-adhesive wrap is used to cover the object and maintain constant pressure on the wart overnight. We typically use a dried pinto bean (a variety of the common bean

Phaseolus vulgaris) acquired from a local grocery store due to its ideal size, hard surface, and convex shape (Figure 1). The bean is taped in place directly overlying the wart and covered with a self-adhesive wrap overnight. The wrap is removed in the morning, and often no further treatment is needed. The ischemic wart tissue is allowed to slough spontaneously over 1 to 2 weeks. No wound care or dressing is necessary (Figure 2). Larger warts may require application of the pressure wraps for 2 to 3 additional nights. While most warts resolve with this technique, we have observed a recurrence rate similar to that for cryotherapy. Patients are advised that any recurrent warts can be re-treated monthly, if needed, until resolution.

What to Use and How to Prepare—Any small, hard, convex object can be used for the pressure wrap; we also have used appropriately sized and shaped plastic shirt buttons with similar results. Home kits can be assembled in advance and provided to patients at their initial visit along with appropriate instructions (Figure 1A).

Effects on the Skin and Distal Digit—Application of pressure wraps does not harm normal skin; however, care should be taken when the self-adherent wrap is applied so as not to induce ischemia of the distal digit. The wrap should be applied using gentle pressure with patients experiencing minimal discomfort from the overnight application.

Indications—This pressure wrap technique can be employed on most digital warts, including periungual warts, which can be difficult to treat by other means. However, in our experience this technique is not effective

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FIGURE 1. A, The home pressure wrap kit includes pinto beans, stretch tape, and a self-adherent wrap. B, A pinto bean is taped in place directly over the wart. C, The self-adherent wrap is applied to augment the pressure of the secured bean.

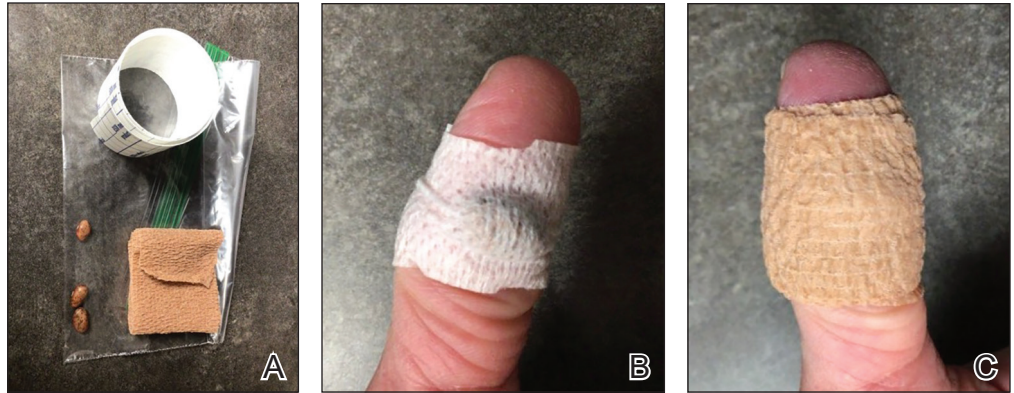
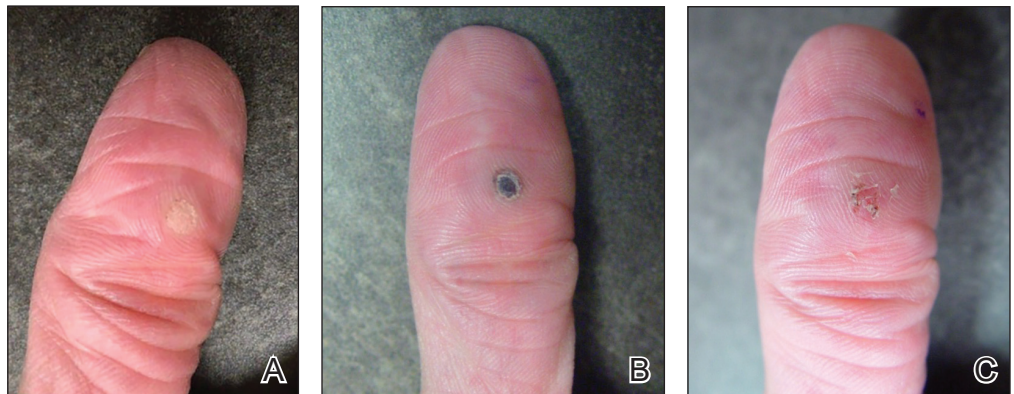


FIGURE 2. A–C, The digital wart before treatment, 2 days after a single overnight pressure wrap application showing necrosis of the wart, and 6 days posttreatment showing evidence of sloughing.



for nondigital warts, likely due to the inability to maintain adequate pressure with the overlying dressing. Patients at risk for compromised digital perfusion, such as those with Raynaud phenomenon or systemic sclerosis, should not be treated with pressure wraps due to possible digital ischemia.

Precautions—Patients should be advised that the pinto bean should only be used if dry and should not be ingested. The bean can be a choking hazard for small children, therefore appropriate precautions should be used. Allergic contact dermatitis to the materials used in this technique is possible, but we have never observed this. The pinto bean can be reused for future application as long as it remains dry and provides a hard convex surface.

Practice Implications

The probable mechanism of the ischemic changes to the wart tissue likely is the occlusion of tortuous blood vessels in the dermal papillae, which are intrinsic to wart tissue and absent in normal skin.¹ This pressure-induced ischemic injury allows for selective destruction of the wart tissue with sparing of the normal skin. Our technique is

fairly novel, although at least one report in the literature has described the use of a mechanical device to induce ischemic changes in skin tags.⁵

The use of pinto bean pressure wraps to induce ischemic change in digital warts provides a low-risk and nearly pain-free alternative to more expensive and invasive treatment methods. Moreover, this technique allows for a low-cost home-based therapy that can be repeated easily for other digital sites or if recurrence is noted.

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