

### Duct Tape More Effective than Cryotherapy for Warts

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Common warts (*verruca vulgaris*) are a common problem among patients who present in family physicians' offices. Although a significant number of warts will spontaneously resolve over two years, patients frequently request treatment to clear their skin of the lesions. Treatments such as cryotherapy, acid preparations, laser therapy, heat, and tape occlusion have been used in the management of warts, with cure rates ranging from 32 to 93 percent. However, most of these therapies are expensive, painful, or labor intensive. A few small, non-randomized trials have studied the use of tape occlusion in wart treatment, with one study reporting cure rates of approximately 80 percent. Focht and associates compared the effectiveness of cryotherapy with duct tape applied to common warts.

The study was a prospective, randomized controlled trial with two treatment arms. Participants were patients three to 22 years of age who had viral warts and presented to a military clinic. Participants were randomized to receive cryotherapy or occlusive therapy with duct tape. Cryotherapy consisted of 10-second applications of liquid nitrogen to each wart every two to three weeks for a maximum of six treatments. The other group applied small pieces of duct tape to each wart. They were instructed to leave the tape in place for six days and were taught how to re-apply tape if it fell off. At the end of the sixth day, the patients removed the duct tape, soaked the wart in water, and gently debrided it with an emery board or pumice stone. The tape was left off overnight, then re-applied for another six days. This pattern was repeated for two months or until the wart resolved. Warts that did not resolve were measured. The main outcome measured was complete resolution of the wart.

In patients treated with duct tape, 85 percent of the warts completely resolved, compared with 60 percent in the cryotherapy group. These results were statistically significant. Resolution of warts treated with duct tape usually occurred within the first 28 days of therapy. If there was no response within the first two weeks, the warts were unlikely to respond to a longer course of therapy. The main adverse outcomes with duct-tape therapy were difficulty keeping the tape on the wart and minor skin irritation. The main adverse effect in the cryotherapy group was mild to severe pain at the freeze site during and after the treatment.

The authors conclude that duct tape occlusive therapy is more effective than cryotherapy in the treatment of common warts. They also state that duct tape therapy is less expensive and has fewer adverse effects than cryotherapy.

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