What nonpharmacological treatments are effective against common nongenital warts?

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EVIDENCE-BASED ANSWER

Cryotherapy has similar cure rates to topical salicylate (a pharmacologic therapy) for non-genital common warts (strength of recommendation [SOR]: **B**, based on systemic review of variable quality randomized trials). Duct tape may be equivalent to cryotherapy (SOR: **B**, based on a single randomized trial). CO_2 laser, photodynamic therapy, pulsed dye laser (PDL), and Er:Yag laser therapies may also be effective for recalcitrant warts (SOR: **C**, based on observational cohort studies).

CLINICAL COMMENTARY

With high spontaneous cure rates, communication and individualized treatment remain the cornerstones

When I was 6 years old, my grandfather—a country doctor in rural Switzerland—announced that the next day he was going to burn off the 3 warts on my right knee. Terrified, I consulted anyone who would listen. It was the advice of the old woman next door that resulted in a complete cure by the following morning: find a slug and let it slither across your warts from right to left 3 times!

Does slug slime have antiviral properties? Does fear stimulate the immune system? Is perception of need linked to terror of treatment? As long as we still recommend everything from burning and freezing, to duct tape and beetle juice, it is clear that the ideal treatment of warts still eludes us. With spontaneous cure rates similar to those following treatment, excellent communication and an individualized treatment plan for each patient will remain the cornerstone of this clinical challenge.

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Evidence summary

The evaluation of treatments of nongenital warts is confounded by the propensity of simple warts to disappear spontaneously. Approximately two thirds of warts resolved without therapy over a 2-year period, according to 1 study in an institutional population.[1] Since adverse effects from treatment, such as pain and scarring, can occur, patients should be educated as to options of therapy (or no therapy).[2]

Seventeen studies of cryotherapy with between 30 and 400 patients show cure rates ranging from 29% to 87%, although most did not have placebo arms. Pooled data from 69 patients in 2 small studies did not show a benefit between the cryotherapy and nontreatment arms,[3] although there were very low cure rates from cryotherapy in 1 study and high spontaneous remission

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rates in the other. Longer freeze times seem to improve cryotherapy cure rates but also cause increased blistering and pain.[4]

One randomized controlled trial of 61 patients showed cure rates of 85% with duct tape vs 60% with cryotherapy.[5] Duct tape therapy had the advantages of reduced cost and less pain.

Although pulsed dye laser has efficacy in various studies, no evidence favors it over cryotherapy or cantharidin.[6] Treatment with CO_2 laser and Er:Yag laser had an efficacy of 52% to 100%. However, many of these studies were small, poorly randomized, and had no placebo control. The potential hazard of aerosolized virus particles from these therapies has not been evaluated.[7]

Two recent reviews also found that cryotherapy is similar in efficacy to salicylic acid, and reported that other nonpharmacologic treatments lack evidence.[2,8]

Recommendations from others

The American Academy of Dermatology states that "in children, warts can disappear without treatment over a period of several months to several years. However, warts that are bothersome, painful, or rapidly multiplying should be treated."[9] Nonpharmacologic treatments recommended include cryotherapy, electrosurgery, "cutting," and lasers.

FAST TRACK

About two thirds of warts resolve without therapy over a 2-year period; weigh this against possible adverse effects from treatment

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