

Treatment of Warts with Topical Formic Acid

Dear Editor,

Wart is a common dermatologic disease caused by infection with various strains of human papilloma virus,¹ and mostly seen in children.^{2,3} Age, immunologic status and compliance of the individual, as well as extent and the duration of the lesion may help to determine the treatment modality.^{4,5}

A case control, double-blind clinical trial was performed in 79 school students, aged 12-17 yrs, with common warts in Kerman, South of Iran. The sites of warts included the scalp, trunk, feet, etc. with their hands being the predominant site. Case group consisted of 42 individuals treated with topical application of 85% formic acid and control group consisted of 37 individuals treated with water as placebo. The total number of applications was limited to 12, after which the treatment was considered to have failed. Applications were done on alternate days for four weeks, and follow-up consisted once a month for three consecutive months. The appearance of new lesions and the presence of secondary infection and other side-effects were noted concomitantly. Concomitantly, in case and control groups the average number of application required for the warts to disappear was 5.9 ± 3.8 vs. 11.1 ± 2.6 ; the mean duration of the disease and the number of lesions in were 19.4 ± 11.0 vs. 14.5 ± 17.4 months and 2.2 ± 2.0 vs. 2.5 ± 3.1 ; and finally the efficiency of the therapy assessed at the end of the first month, as complete or partial remissions were 81% vs. 9.5 % and 11% vs. 2.7%.

The caustic acids used in the treatment of common warts are of different strengths, salicylic acid being the weakest, trichloroacetic acid in the middle and bichloroacetic acid being the strongest.¹ Whereas, the strength of formic acid is between salicylic acid and trichloroacetic acid.² Formic acid might work like formalin by dehydrating and finally destroying the wart-infected tissue.² This is so because the wart becomes slightly white in color followed by peeling off the superficial layer. The result of the present study, as stated by Bhat and colleagues too,⁵ is indicating that the use of 85% formic acid on warts is safe, effective with minimal side-effects. This is an economic method with no sophisticated equipment requirements. The other benefits of this method are being painless; with minimal scarring. If the 85% formic acid is applied carefully on the wart area it can help in their regression. Therefore, this study proves that 85% formic acid is a safe, economic & effective modality in the treatment of common warts.

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