

Early Treatment with Imiquimod 5% Cream of Periungual Warts in Vietnam: The Poorer, the Better

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Abstract

Citation: Thi Minh PP, Pham Thi L, Tran Lan A, Nguyen Van T, Le Van H, Tran Cam V, Gandolfi M, Feliciani C, Satolli F, Tirant M, Vojvodic A, Torello Lotti T. Early Treatment with Imiquimod 5% Cream of Periungual Warts in Vietnam: The Poorer, The Better. Open Access Maced J Med Sci. <https://doi.org/10.3889/oamjms.2019.053>

Keywords: Imiquimod; Periungual warts

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Received: 02-Jan-2019; **Revised:** 16-Jan-2019; **Accepted:** 17-Jan-2019; **Online first:** 25-Jan-2019

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Funding: This research did not receive any financial support

Competing Interests: The authors have declared that no competing interests exist

AIM: To evaluate the efficacy of imiquimod 5% in periungual wart treatment.

MATERIAL AND METHODS: A group of 40 patients were recruited to apply imiquimod 5% cream once daily for 5 consecutive days per week in 8 weeks. They were classified into 3 levels: Mild (the total lesion area $\leq 25 \text{ mm}^2$), moderate ($25 \text{ mm}^2 < \text{total lesion area} \leq 50 \text{ mm}^2$), severe (total lesion area $> 50 \text{ mm}^2$). The outcome was evaluated at the 4th and the 8th week. The result was graded as excellent (complete clearance), good ($\geq 50\%$ clearance) and poor ($< 50\%$ clearance).

RESULTS: The total area of the wart lesion got decreased significantly from the beginning to the 4th and the 8th week (36.7 mm^2 vs 16.8 mm^2 , $p = 0.0001$ and 16.8 mm^2 vs 8.8 mm^2 , $p = 0.01$). The complete clearance rate at the 4th week was lower than that at the 8th week significantly (22.5% vs 72.5% , $p = 0.04$). The clearance rate of patients suffering severe warts was lower significantly than that of mild/moderate patients (82.8% vs 45.5% , $p = 0.03$). The duration of the disease in people who responded completely to imiquimod was shorter than that of patients partially responded (10.2 ± 14.1 months vs 22.3 ± 14.3 months, $p = 0.02$). Adverse effects were not common, mild and local only. Recurrence rate after 6 months of follow up was 3.5%.

CONCLUSION: In conclusion, Imiquimod 5% cream is a safe and effective drug in the treatment of periungual warts.

Introduction

Periungual warts a common skin disease and can interfere with nails development, mainly in immunosuppressed patients [1], [2].

Tissue destruction therapy is painful, and the recurrence is frequent. Imiquimod is a topical immunosuppressive agent, which stimulates the production of inflammatory cytokines that activate and maintain cell-mediated immune response [3].

This study aimed to evaluate the efficacy of imiquimod 5%, once daily for 5 consecutive days per week, in periungual wart treatment in 40 Vietnamese patients, including 19 females (aged 20.4 ± 13.8) and 21 males (aged 27.3 ± 13.5) patients.

Material and Methods

A group of 40 patients were recruited to apply imiquimod 5% cream once daily for 5 consecutive days per week in 8 weeks. They were classified into 3 levels: Mild (the total lesion area $\leq 25 \text{ mm}^2$), moderate ($25 \text{ mm}^2 < \text{total lesion area} \leq 50 \text{ mm}^2$), severe (total lesion area $> 50 \text{ mm}^2$).

The outcome was evaluated at the 4th and the 8th week.

The result was graded as excellent (complete clearance), good ($\geq 50\%$ clearance) and poor ($< 50\%$ clearance).

Results

The warts condition before the treatment was mild in 21 patients (52.5%) (the total lesion area $\leq 25 \text{ mm}^2$), moderate in 8 patients (20.0%) ($25 \text{ mm}^2 < \text{total lesion area} \leq 50 \text{ mm}^2$) and severe in 11 patients (27.5%) (total lesion area $> 50 \text{ mm}^2$). The duration of disease was 13.5 ± 15.0 months.

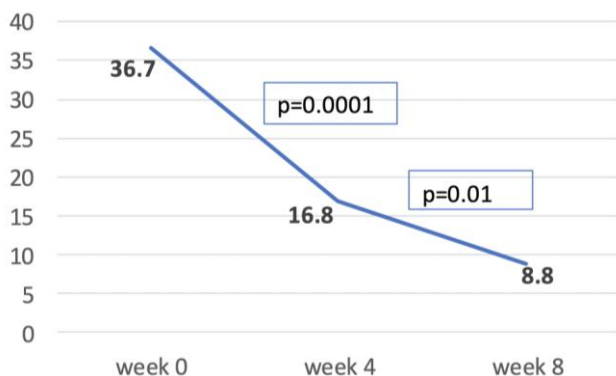


Figure 1: Wart area (in mm²) change by the time

The total area of warts got decreased significantly from 36.7 mm^2 at week 0 to 16.8 mm^2 at the 4th week and 8.8 mm^2 at the 8th week ($p < 0.05$) as shown in Figure 1. The excellent outcome at the 8th week was higher than that at the week 4th significantly (72.5% vs 22.5%, $p = 0.04$). The complete clearing rate at the 8th week was significantly higher than that at the 4th week due to the slow effect of imiquimod in stimulating immune cells.

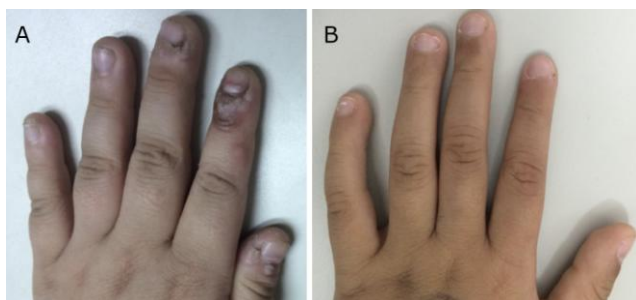


Figure 2: Periungual warts before (A) and after (B) treatment with imiquimod 5 % cream

An excellent outcome was seen in 68.2% of people who had got treated by other modalities before applying imiquimod and 77.8% of naïve patients, the difference was not significant ($p = 0.37$, Fisher exact test) (Table 1).

Table 1: Treatment outcomes and related factors

Outcomes	N	Wart duration (m ± SD)	P	Wart severity at the beginning				P	Treatment before imiquimod				P
				Severe		Mild/moderate			Yes		No		
				N	%	N	%		N	%	N	%	
Excellent	29	10.2 ± 14.1	0.02	5	45.5	24	82.8	0.03	15	68.2	14	77.8	0.37*
Good/poor	11	22.3 ± 14.3		6	54.5	5	17.2		7	31.8	4	22.2	

*: Fisher's exact test.

No systemic side effects have been reported. Local side effects had been seen in 37.5% patients, but 73.33% of the side effect was mild.

After 6 months of follow-up, there was only one relapse case (3.5%) after 3 months.

Discussion

Excellent results in a group of patients suffering mild/moderate wart were higher than that of the group having severe wart (82.8% vs 45.5%, $p = 0.03$). So longer the duration of disease was, the less effective the treatment modality was [4], [5], [6].

There was only one relapse case after 3 months. It could be explained by the ability of imiquimod cream that can start and maintain HPV specific cell-mediated immunity [7], [8], [9], [10].

In conclusions, Imiquimod 5% cream is safe and effective drug in the treatment of periungual warts. Early treatment leads to better results.

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