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

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Abstract

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 ≤ 25 mm²), moderate (25 mm² < total lesion area ≤ 50 mm²), severe (total lesion area > 50 mm²). The outcome was evaluated at the 4th and the 8th week. The result was graded as excellent (complete clearance), good (≥ 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 mm² vs 16.8 mm², p = 0.0001 and 16.8 mm² vs 8.8 mm², 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.
Results

The warts condition before the treatment was mild in 21 patients (52.5%) (the total lesion area ≤ 25 mm²), moderate in 8 patients (20.0%) (25 mm² < total lesion area ≤ 50 mm²) and severe in 11 patients (27.5%) (total lesion area > 50 mm²). 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 mm² at week 0 to 16.8 mm² at the 4th week and 8.8 mm² 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 4 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

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>N</th>
<th>Wart duration (in m ± SD)</th>
<th>Wart severity at the beginning</th>
<th>Treatment before imiquimod</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Severe</td>
<td>Mild/moderate</td>
<td>Yes %</td>
</tr>
<tr>
<td>Excellent</td>
<td>28</td>
<td>10.2 ± 14.1</td>
<td>0.02</td>
<td>54.5</td>
<td>24.8</td>
</tr>
<tr>
<td>Grainhouse</td>
<td>12</td>
<td>22.3 ± 14.3</td>
<td></td>
<td>64.5</td>
<td>5</td>
</tr>
</tbody>
</table>

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.

References

