Section: Dermatology

Case Series

ORAL ISOTRETINOIN AS TREATMENT OPTION FOR MULTIPLE RECALCITRANT NON - GENITAL WARTS – A CASE SERIES

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ABSTRACT

Background: Non-genital warts represent a common dermatological issue, affecting nearly 7–10% of individuals and frequently seen in outpatient clinics. These lesions result from infection with the human papillomavirus (HPV), typically gaining entry through superficial abrasions in the skin. HPV types 1, 2, 4, 27, and 57 are most frequently linked to common warts, particularly those appearing on the hands and feet. Although around two-thirds of cases resolve spontaneously over time, a portion—identified as "recalcitrant warts"—persists despite undergoing a minimum of five treatment sessions within six months. This stubborn subset can account for up to one-third of all cases. Systemic retinoids, particularly known for modulating epidermal cell turnover and differentiation, along with their immunoregulatory activity and inhibition of HPV gene transcription, have emerged as a promising therapeutic avenue. The present study aims to evaluate the efficacy of low-dose oral isotretinoin in the treatment of recalcitrant non-genital warts. A Case series of 5 patients, 5 male patients of age 24, 38, 32, 16 & 22 with multiple recalcitrant Verruca vulgaris, who have received multiple treatments with Intralesional MMR, Cryotherapy, Topical salicylic acid and tretinoin over the past 7 to 8 months were put on oral isotretinoin 20mg/day for 4 months was prescribed to evaluate its efficacy in patients with multiple recalcitrant non genital wart and showed good improvement, without any relapse in next 3 months of observation period.

INTRODUCTION

Warts caused by human papillomavirus (HPV), which gains access through minor skin abrasions. The common variants affecting the hands and feet are most often attributed to HPV types 1, 2, 4, 27, and 57.[1] Non-genital warts are seen in approximately 7–10% of the population and are a frequent reason for dermatological consultation. Although the majority tend to regress without intervention, a portion remains despite multiple treatment attempts. When lesions do not improve after at least five therapeutic sessions across a six-month period, they are classified as 'recalcitrant warts' representing nearly one-third of all non-genital wart cases.[2] Due to the stubborn behavior of these lesions, exploring alternative treatment strategies becomes crucial. Systemic retinoids, especially isotretinoin, have demonstrated potential owing to their influence on epidermal proliferation and differentiation, ability to modulate immune function, and inhibition of viral gene expression in affected cells. The present investigation seeks to assess the therapeutic impact of low-dose oral isotretinoin in managing recalcitrant non-genital warts.[3]

CASE SERIES

A Case series of 5 patients, 5 male patients of age 24, 32, 38, 16 & 22 with multiple recalcitrant Verruca vulgaris, who have received multiple treatments with Intralesional MMR, Cryotherapy, Topical salicylic acid and tretinoin over the past 7 to 8 months were put on oral isotretinoin 20mg/day for 4 months was prescribed to evaluate its efficacy in patients with multiple recalcitrant non genital wart and showed good improvement, without any relapse in next 3 months of observation period.

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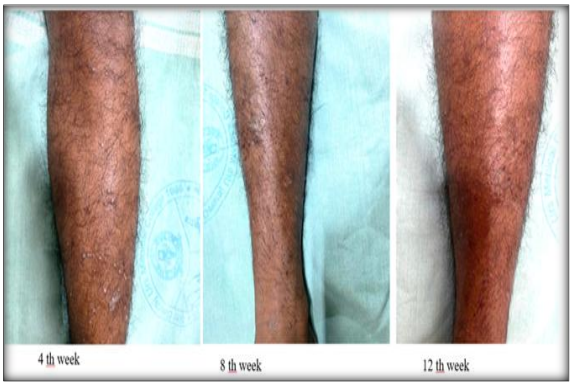
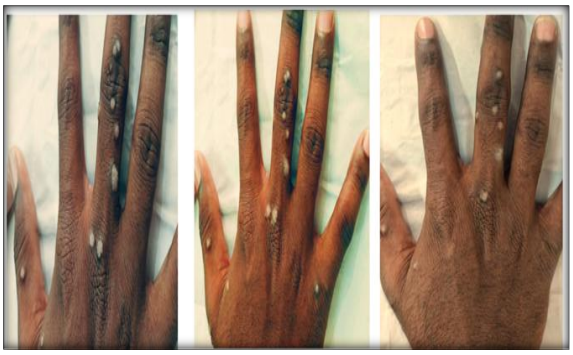
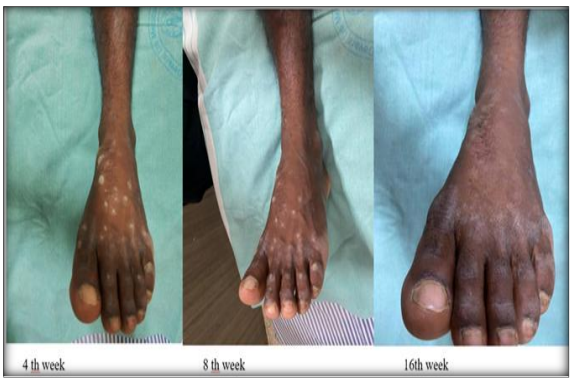
CASE 1- A 24Year old male a k/c/o verruca vulgaris since 7 months treated with Inj. MMR for 4 sittings without any resolution of lesion was given T. ISOTRETINOIN 20mg per day for 12 weeks and showed complete resolution.



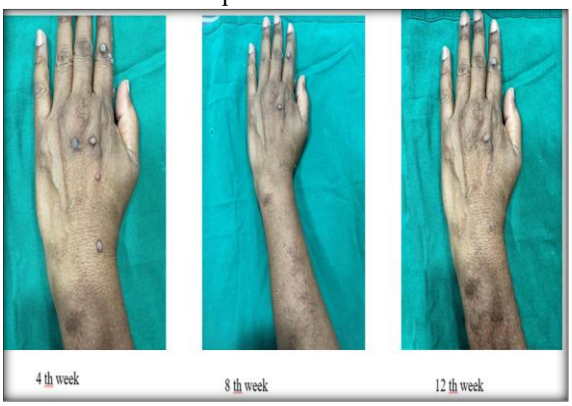
CASE 2: A 38Year old, K/C/O verruca vulgaris since 8 months treated with Inj. MMR of 4 sittings, 3 sittings of cryotherapy without any resolution of was given T. ISOTRETINOIN 20mg per day for 12 weeks and showed moderate improvement.



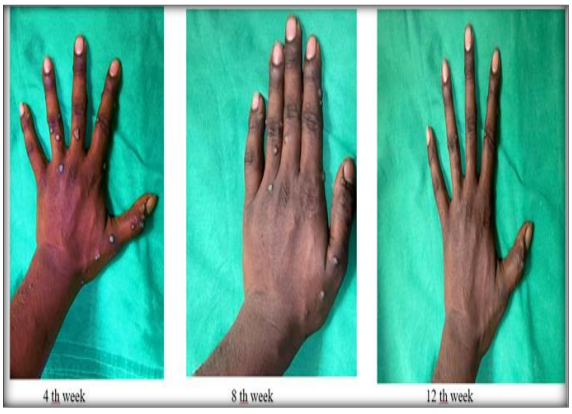
CASE 3: A 32Year old male a k/c/o verruca vulgaris since 8 months treated with Inj. MMR 5 sittings and cryotherapy 1 sitting without any resolution of lesion was given T. ISOTRETINOIN 20mg per day for 16 weeks and showed complete resolution.



CASE 4: A 26Year old male presented with K/C/O verruca vulgaris since 9 months treated with Inj. MMR for 5 sittings, 3 sittings of cryotherapy without any resolution of lesion was given T. ISOTRETINOIN 20mg per day for 12 weeks and showed moderate improvement.



CASE 5: A 22Year old male, K/C/O verruca vulgaris since 7 months treated with Inj. MMR for 4 sittings and cryotherapy for 2 sittings without any resolution of lesion was given T. ISOTRETINOIN 20mg per day for 12 weeks and showed good improvement.



DISCUSSION

Warts remain a therapeutic dilemma, especially when extensively distributed on facial skin, even among individuals with competent immune systems.[4] Conventional modalities targeting HPV often yield inconsistent outcomes and are frequently accompanied by high relapse rates. Introducing systemic therapies may represent a more comprehensive method for viral suppression.[5]

A review of prior research reveals that only a few studies have assessed the therapeutic role of systemic isotretinoin in managing condylomata acuminata. Meanwhile, etretinate has shown effectiveness in treating hyperkeratotic warts among immunocompromised individuals. The accepted cumulative dosage of oral isotretinoin in treating acne vulgaris is 120 mg/kg, generally administered at 1 mg/kg/day for a duration of four months.[6] Nevertheless, such higher dosing regimens are often linked with a considerable risk of adverse reactions.[7] Warts may persist for long durations and tend to exhibit resistance to standard treatment strategies. Evidence from earlier studies indicates that oral isotretinoin can be a successful treatment for

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recalcitrant warts, with additional advantages such as affordability, wide accessibility, and a well-established safety profile, especially in pediatric populations when given at lower cumulative doses for shorter periods.[8] The manageable and reversible adverse effects further substantiate its utility.

It is suggested that cumulative doses below 30 mg/kg may be less effective, potentially resulting in reduced response rates and increased likelihood of recurrence. However, for patients who are unable to tolerate the standard 0.5 mg/kg/day dosage, administering a reduced dose of 0.25 mg/kg daily over four months may still help achieve the 30 mg/kg cumulative threshold, improving tolerability without compromising efficacy.[9]

Moreover, increasing the cumulative dose to 60 mg/kg over a four-month course might improve clinical outcomes and reduce the probability of recurrence. Further investigative efforts are necessary to determine the effectiveness and safety profile of this higher-dose regimen in adults with recalcitrant warts who can tolerate a relatively higher incidence of adverse effects.

Current therapeutic options primarily focus on the physical destruction of affected tissue. None of the existing interventions directly target viral replication, and there is no specificity in the elimination of HPV-infected cells. Therefore, the demand for a targeted antiviral treatment that can selectively act against HPV-infected tissues and ensure viral eradication remains critical. This case series presents oral isotretinoin as a potential alternative for treating recalcitrant non-genital warts, with a favorable tolerability profile and promising clinical benefits.

CONCLUSION

This case series demonstrates that low-dose oral isotretinoin may offer a safe and effective alternative for the management of multiple recalcitrant non-genital warts, particularly in patients unresponsive to conventional treatments such as cryotherapy, intralesional MMR, and topical agents. The favorable outcomes observed—ranging from complete clearance to marked improvement with minimal side effects—underscore the potential of isotretinoin to serve as an immunomodulatory and antiproliferative agent against HPV-induced cutaneous lesions. Furthermore, the absence of relapse during the three-month follow-up period supports its therapeutic durability. While these findings are promising, randomized controlled trials with larger sample sizes and extended follow-up are warranted to further validate its efficacy, determine optimal dosing regimens, and better understand its mechanism of action in the context of HPV-related dermatoses.

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