

Acitretin in the management of recalcitrant warts

Sir,

Warts or verrucae are benign proliferations of cutaneous and mucosal epithelium caused by the Human Papilloma Virus, mainly of types 2, 1, and 57. It is a common skin disease with a prevalence of up to 10%.^[1] Usually 65% of warts disappear within two years,^[2] but the remaining 35% may become recalcitrant. The apparent failure of

the immune system to clear warts in otherwise healthy individuals remains incompletely understood. Treatment failures and recurrences of warts are still seen in spite of various modalities of treatments. We present here a case of multiple recalcitrant warts treated with oral acitretin.

A 20 year-old man employed as a waiter, presented with verrucous lesions over the face, palms and left lower limb for a duration of six years. Lesions began on the face and gradually spread to other parts of the body. There was no family history of similar or of any other skin lesions. He underwent various modalities of treatment such as wart paint and salicylic acid local applications for several months; laser vaporization was done three times at an interval of five months. However, all therapies were followed by prompt recurrences.

Cutaneous examination revealed multiple, discrete, hyperkeratotic, verrucous, hyperpigmented papules measuring 2–5 mm in diameter on the face, palms and left lower limb [Figure 1]. His blood counts, lipid profile, liver and renal function tests, total protein and albumin were within normal limits. The ELISA test for Human Immunodeficiency

Virus was negative.

The patient was treated with oral acitretin 0.5 mg/kg body weight/day for a total duration of three months.^[3] Vaseline petroleum jelly and moisturizing cream were added to counteract the side effects of acitretin. He was regularly followed up with the aid of his serum triglyceride levels, which remained within range. After three months of acitretin therapy, the lesions had completely flattened leaving hyperpigmented macules [Figure 2]. No recurrence was seen during follow-up for six months after treatment.

Warts are one of the most common skin diseases occurring at any age, but incidence has been found to be higher in school-age children (3–20%), peaking in adolescence. Although it is a common disease, warts still pose a therapeutic challenge. Despite the availability of various treatment modalities, recurrences, relapses, and the recalcitrant nature of warts are common because of the lack of specific antiviral medications against common warts.

Retinoids have anti-keratinizing, anti-proliferating and anti-inflammatory properties. As viral replication depends on



Figure 1: Before treatment



Figure 2: After treatment

keratinocyte differentiation, it is possible that acitretin may inhibit viral replication and assembly within the affected cells.^[3] Oral retinoids have been used with remarkable improvement in the management of extensive and recalcitrant warts without recurrences.^[3,4]

Epidermodysplasia verruciformis, an inherited disorder characterized by widespread and persistent infection with HPV, pityriasis versicolor-like lesions and reddish plaques, has shown dramatic improvement with oral acitretin when used alone or in combination.^[5] Our patient tolerated the oral acitretin well with gratifying clinical results without any major side effects or recurrences. Hence, oral acitretin can be considered as a useful treatment option for extensive recalcitrant warts.

D. S. Krupa Shankar, Rachana Shilpakar

Department of Dermatology, Manipal Hospital, Bangalore, India

Address for correspondence: Dr. D. S. Krupa Shankar, Head of Department, Department of Dermatology, Manipal Hospital, 98, Rustom Bagh, Airport Road, Bangalore 560017, India, Email: dermakrupa@gmail.com

REFERENCES

1. Laurent R, Kienzler JL. Epidemiology of HPV infection. *Clin Dermatol* 1985;3:64-70.
2. Massing AM, Epstein WL. Natural history of warts. A two year study. *Arch Dermatol* 1963;87:306-10.
3. Choi YL, Lee KJ, Kim WS, Lee DY, Lee JH, Lee ES, *et al.* Treatment of extensive and recalcitrant viral warts with acitretin. *Int J Dermatol* 2006;45:480-2.
4. Gelmetti C, Cerri D, Schiuma AA, Menni S. 20 children with extensive warts were given Etretnate 1mg/kg/day for 3months. *Pediatr Dermatol* 1987;4:254-8.
5. Anadolu R, Oskay T, Erdem C, Boyvat A, Terzi E, Gurgey E. Treatment of epidermodysplasia verruciformis with a combination of acitretin and interferon alfa-2a. *J Am Acad Dermatol* 2001;45:296-9.