Sir, Verrucous carcinoma of the foot is a rare, locally invasive, well-differentiated low-grade squamous cell carcinoma, with human papillomavirus as a possible causative agent. Diagnosis is confirmed on histopathology, and wide local excision is considered as the treatment of choice.[1] In our report, we have demonstrated good clinical outcome with oral retinoid with no recurrence.

A 50-year-old woman presented with a slowly enlarging slightly painful mass over the right foot for the past 1 year. Her past medical history showed that she had diabetes for the last 10 years and was currently on oral hypoglycemic drugs with good glycemic control. She treated herself with over-the-counter topical creams and emollients with partial relief. In the last 3 months, she noticed pus discharge from the lesion and was prescribed topical and oral antibiotics with a partial clinical response. Although she noticed a decrease in the amount of pus drainage, there was no apparent decrease in the size of lesion. She consulted a surgeon who made a diagnosis of corn and got herself operated with local excision of the mass with primary closure. However, the lesion recurred again after 3 months. She visited another surgeon who did a second round of excision of her foot mass, thinking it to be recurrent corn. The excised mass was sent for histopathology and was reported as nonspecific chronic inflammation with no evidence of malignancy. However, the lesion recurred again and she visited a diabetic foot specialist who treated her with regular paring and dressing. A dermatologist opinion was sought, and a working diagnosis of verrucous carcinoma was made on history and clinical examination. Local examination showed a whitish macerated endophytic growth on the plantar surface along the lateral side [Figure 1]. Scars of previous operative procedures were seen. Previously excised specimen was reviewed, which showed parakeratosis, hyperkeratosis, and endophytic growth with bulbous rete ridges composed of defectively benign squamous epithelial cells with mild atypia [Figure 2]. These were surrounded by fibrous stroma containing ectatic blood vessels and inflammatory infiltrate predominantly composed of neutrophils. On clinicopathological correlation, a diagnosis of verrucous carcinoma of sole was made.

Her complete hemogram and routine serum chemistry was within normal range. X-ray of the foot showed soft-tissue involvement with no bony extension or any damage to tendons. We treated her with oral acitretin at the dose of 25 mg bid for 2 months with 60% reduction in verrucous mass. Later on, the dose was reduced to 25 mg OD till complete resolution of the lesion which took another 2 months [Figure 3]. Then, acitretin was tapered for 10 mg/day for 2 months. Later, it was stopped and the patient was advised to apply adapalene 0.1% gel locally twice a day. There is no recurrence for the next 6 months after stoppage of acitretin therapy. The patient tolerated the therapy well except for dry lips and generalized xerosis, which were managed symptomatically with liberal use of moisturizers and emollients. Serum transaminase and lipid profile remained within normal range during the treatment period.

Although acitretin is being used as a chemopreventive agent to keep a check on solid organ transplant-related skin malignancies,
there is a paucity of data in the world literature regarding the use of acitretin in histologically proven verrucous carcinoma. In 2000, Mehta et al. reported successful use of oral acitretin in a case of verrucous carcinoma of vulva.[6] Retinoids exert antiproliferative action on certain types of neoplasm. In our case, the neoplasm responded to monotherapy of oral acitretin roughly at a dose of 1 mg/kg body weight. Kuan et al. documented the use of oral acitretin in multiple verrucous carcinomas.[3] However, other workers disputed the diagnosis of multiple verrucous carcinomas and suggested that the case seems to be of verrucous psoriasis.[4] How retinoid exerts anticancer effect on cutaneous malignancies is still not clear. Retinoids do not seem to act on known cell cycle pathway as compared to traditional chemotherapy drugs. It is plausible that retinoid promotes differentiation and leads to clearance of malignant tissue. In conclusion, acitretin monotherapy seems to be effective in the management of cutaneous verrucous carcinoma. It is worth trying acitretin as a treatment for cutaneous verrucous carcinoma before painful excision and its therapeutic potential needs to be further explored in large case series.

**Declaration of patient consent**

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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**Conflicts of interest**

There are no conflicts of interest.

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**REFERENCES**

1. Lesic A, Nikolic M, Sopća J, Starcevic B, Bumbasirevic M, Atkinson HD, et al. Verrucous carcinoma of the foot: A case report. J Orthop Surg (Hong Kong) 2008;16:251-3.
2. Mehta RK, Rytina E, Sterling JC. Treatment of verrucous carcinoma of vulva with acitretin. Br J Dermatol 2000;142:1195-8.
3. Kuan YZ, Hsu HC, Kuo TT, Huang YH, Ho HC. Multiple verrucous carcinomas treated with acitretin. J Am Acad Dermatol 2007;56:S29-32.
4. Larsen F, Susa JS, Cockerell CJ, Abramovits W. Case of multiple verrucous carcinomas responding to treatment with acetretin more likely to have been a case of verrucous psoriasis. J Am Acad Dermatol 2007;57:534-5.

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