

Acitretin-induced pyogenic granuloma

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K E Y W O R D S

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Case Report

A 70-year-old man presented with a 3-week history of rapidly growing, painful raised lesions with spontaneous bleeding, localized on the dorsum of the toenail of the first toes on both feet. He had been receiving acitretin (25 mg daily) for palmoplantar psoriasis for 4 months. The patient had no history of nail trauma or infection. Physical examination revealed erythematous, bleeding vascular tissue with a moist, friable surface on the lateral folds of both first toenails (Fig. 1). Physical examination was normal elsewhere, except for the psoriasis plaques. The tumors recurred rapidly at the same site after electrodesiccation, but complete resolution of the condition was noted after discontinuation of acitretin therapy. A diagnosis of acitretin-induced pyogenic granuloma (PG) was made. The patient showed no relapse after 3 years of follow-up.

Discussion

PG is a common, acquired, benign vascular tumor that usually occurs on the distal extremities, especially the fingers and toes (1). It may be a drug-induced condition, especially when multiple locations are affected



Figure 1. Erythematous, bleeding vascular tissue of the lateral nail folds of the first toes on both feet.

(2). Although acitretin is a frequently prescribed synthetic oral retinoid, fewer than 30 cases of acitretin-induced PG have been reported in the literature (3).

Systemic retinoid therapy can have the same side effect as hypervitaminosis A (4). Vitamin A is essential in the early stages of wound healing but hyper-

vitaminosis A may cause the formation of an excessive granulation tissue. This effect occurs when the maximum limit at which the liver can store retinoids is exceeded (5).

PG occurs 3 to 12 weeks after the onset of acitretin therapy. As seen in our patient, it resolves spontaneously after the discontinuation of therapy or after tapering doses (6).

REFERENCES

1. Wollina U. Multiple eruptive periungual pyogenic granulomas during anti-CD20 monoclonal antibody therapy for rheumatoid arthritis. *J Dermatol Case Rep.* 2010;4:44–6.
2. Palmero ML, Pope E. Eruptive pyogenic granulomas developing after drug hypersensitivity reaction. *J Am Acad Dermatol.* 2009;60:855–7.
3. Amin A, Shwayder T. Acitretin + EHK = PG: Toe web pyogenic granuloma in a man with total body epidermolytic hyperkeratosis on acitretin: report of a unique occurrence. *Dermatol Nurs.* 2009;21:345–7.
4. Booi MT, Van De Kerkhof PC. Acitretin revisited in the era of biologics. *J Dermatolog Treat.* 2011;22:86–9.
5. Campbell JP, Grekin RC, Ellis CN, Matsuda-John SS, Swanson NA, Voorhees JJ. Retinoid therapy is associated with excess granulation tissue responses. *J Am Acad Dermatol.* 1983;9:708–13.
6. Requena L. Cutaneous vascular proliferation. Part II. Hyperplasias and benign neoplasms. *J Am Acad Dermatol.* 1997;37:887–919.

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