Acrodermatitis Continua of Hallopeau with Psoriatic Arthritis

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Acrodermatitis continua of Hallopeau (ACH) is a form of localized pustular psoriasis that can be associated with psoriatic arthritis (PsA)^{1,2}.

A 53-year-old male presented with a 1-year history of fingernail and toenail dystrophy and pustules on the distal toes. Examination revealed distal onycholysis of the fingernails, as well as onycholysis and subungual hyperkeratosis of the toenails. There were scattered crusted papules (pustules) over the insteps and dorsal aspect of the distal toes (Figure 1A and inset of Figure 1B). The clinical presentation was consistent with ACH. The patient was treated with acitretin for 10 months with significant but incomplete improvement. However, the patient developed pain in the toes that impaired mobility. Examination revealed splaying of the distal phalanges with dactylitis affecting multiple digits (Figure 1B). Radiologic, bone scan, and ultrasound features were consistent with PsA. Acitretin was discontinued and secukinumab was initiated. Within 4 months, there was near complete resolution of skin and nail changes as well as relief of joint tenderness and swelling (Figure 1C).

Secukinumab inhibits interleukin (IL)-17A, a proinflammatory cytokine important in the development of psoriasis vulgaris and PsA³. IL-17A recruits inflammatory cells within joints, resulting in synovial inflammation and cartilage destruction³. Secukinumab has been used to treat pustular psoriasis and ACH^{4,5}. Over 2 years of secukinumab therapy, the patient has had full and sustained remission of all symptoms associated with ACH and PsA. Clinicians should be aware of the association of ACH with PsA, and the response to IL-17 inhibition.

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Figure 1. Acrodermatitis continua of Hallopeau. A. At presentation. B. After acitretin for 10 months. The inset shows crusted papules over the dorsal third and fourth digits. C. After secukinumab for 4 months.

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