

Adalimumab treatment of a patient with psoriasis suppurativa Hallopeau associated osteoarthropathy

Sirs,

We report the case of a 20-year-old woman with acrodermatitis continua suppurativa of Hallopeau (ACH). The disease presented as an osteomyelitis in close association with the occurrence of sterile pustules on the nail fold. Disease manifestations were effectively treated after administration of adalimumab.

ACH is a pustular psoriatic disease characterized by the formation of sterile pustules in close association with the nail bed and matrix. In the late course of the disease an atrophy of the phalangeal bone may occur. ACH is frequently resistant to treatment. Various protocols involving methotrexate (1), tetracyclins (2), cyclosporine (3), psoralen plus ultraviolet A light (4), and TNF antagonists (5) have been reported to be effective in some cases. However, a defined and reliable protocol for the treatment of this disease has not yet been published.

A 20-year-old female was clinically and histologically diagnosed as having psoriasis vulgaris in January 2007 with a single erythematous squamous plaque. In February she developed pustules of the nail fold of the right thumb and ring finger. In March the pustules were surgically incised and topical therapy was initiated without success. The patient presented in our rheumatology department thereafter with severe purulent inflammation of the distal phalangeal nailfold of d1 and d4 of the right hand. Bacterial and mycological swabs from the paronychia were sterile. Magnetic resonance tomography suggested osteomyelitis (Fig. 1) of the distal phalanx of d4. After surgical revision systemic antibiotic therapy was initiated. However, histologically no osteomyelitic inflammation could be demonstrated. As sterile pustule formation persisted, the patient presented to a dermatologist who diagnosed ACH. Treatment with 30mg of oral prednisolon was started. Though the pustule formation could be controlled with higher doses of corticosteroids it relapsed after decreasing the dosage. Consequently, DMARD-treatment with methotrexate alone and later in combination with sulfasalazine was initiated. As this anti-inflammatory treatment could not control the disease, adalimumab 40mg/2 weeks was initiated. Pustule formation stopped within four weeks of treatment and dosage of corticosteroid could be tapered to 5mg/d without relapsing inflammation of the involved digits.

In summary, we present the case of a 20-year-old woman with an aggressive ACH. Characteristically, osteoporosis and rarefying osteitis are described in ACH patients without destructions of the bone surface

Fig. 1. MRI scan of the affected right hand: Sagittal gradient-echo T2-weighted MRI. Note the inflammation at the distal phalanx of dig. I, IV.



(6, 7). The patient reported, however, developed a destructive disease mimicking the radiographical picture of osteomyelitis leading to a surgical intervention. As no infection could be found and the disease did not improve subsequent to antibiomatic treatment but rather after administration of corticosteroids, we consider this destructive process as intimately related to chronic inflammatory processes by ACH.

This case is interesting for three reasons. First, it presents the problem of diagnosing ACH with minor clinical symptoms and avoiding possibly disfiguring surgical procedures instead of introducing anti-inflammatory therapy. Secondly, the coincidence of psoriasis vulgaris and ACH is reported to be rare. Thirdly, this case documents the effectiveness of anti-TNF- α treatment. Positive effects on ACH patients have been described for competitive inhibitors of TNF (5, 8, 9). These patients, however, suffered from a non-destructive disease. To the best of our knowledge, only one other case has been reported so far on a patient with erosive ACH who demonstrated significant and sustained clinical improvement after administration of adalimumab (10). We consider a therapeutic escalation starting with corticosteroids, disease modifying drugs, and finally TNF antagonists as a convenient treatment of ACH.

R.B. MUELLER^{1,2},
A. OGILVIE³,
S. SCHWARZ⁴,
P. KERN,
G. SCHEIT¹,
M. STICHERLING³

¹Department for Internal Medicine 3 and Institute for Clinical Immunology, University of Erlangen-Nürnberg, Germany;

²Department of Rheumatology, Kantonsspital St. Gallen, Switzerland; ³Department of Dermatology, and ⁴Department for Pathology,

University of Erlangen-Nürnberg, Germany.

Address correspondence to:

Ruediger B. Mueller MD, Kantonsspital St. Gallen, Rorschacherstr 95, 9007 St. Gallen, Switzerland.

E-mail: ruediger.mueller@gmx.org

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