Letters to the Editor

Behcet's disease developing in longstanding rheumatoid arthritis

Sirs,

Behcet's disease (BD) is a chronic inflammatory disease with involvement of various organs. Although the most common pattern of peripheral arthritis in BD is monoarticular arthritis, oligoarticular or polyarticular involvement is not rare. The arthritis is usually self-limiting and non-erosive, recurs occasionally, and is rarely chronic (1). However, several cases with destructive arthritis, occasionally mimicking rheumatoid arthritis (RA), have been reported (1-8). We here described a patient with longstanding RA who developed BD, the clinical manifestations of which were activated after the extraction of some teeth.

A 41-year-old female presented with complaints of painful oral ulcerations, multiple erythematous nodules on the lower legs, and occipital headache. She had suffered from recurrent oral ulcerations for the past 3 years, and experienced one episode of painful genital ulceration 2 years ago. The oral ulcerations worsened and skin lesions developed after teeth extractions 3 months earlier. In addition, she had been diagnosed with RA based on polyarthritis of the wrists, small joints of the hands, and knees at a private clinic when she was 18 years old.

Physical examination revealed multiple aphthous ulcerations of the oral cavity, pustular eruptions on the forearms, and erythema nodosum-like lesions on both lower legs. There was synovial thickening with tenderness of both wrists accompanied by mild limitation of movement. The pathergy test was positive. Initial laboratory studies were unremarkable except for ESR 68 mm/hr, CRP 7.23 mg/dL, and rheumatoid factor 53 IU/ml. Tissue typing demonstrated A31, B7, B61, DR4, and DR8.

Anteroposterior radiographs of both hands showed symmetric carpal joint space narrowing and destructive arthritis of both wrists. Lateral views of the cervical spine and three-dimensional CT scan revealed bony erosions of the odontoid process and atlas as well as mild atlantoaxial subluxation (AAS). Skin biopsy of the erythematous nodules of the legs showed a lymphocytic vasculitis and panniculitis with a mixed septal and lobular distribution. The diagnosis of BD developing in the context of a longstanding RA was made. Her clinical manifestations were markedly improved within several days after a low dosage of prednisolone, colchicine, nabumetone, and hydroxychloroquine was prescribed.

The diagnosis of BD in the current patient was made based on typical features, including oral and genital ulcerations, skin lesions, and a positive pathergy reaction. Arthritis in BD is usually self-limiting, nonerosive, and non-deforming; however, there have been a few BD cases with erosive arthritis,including patients whose condition mimicked RA. These patients are presented in Table I. The most frequent sites of erosive arthritis were the proximal interphalangeal joints of the feet, followed by the metatarsophalangeal joints, manubriosternal joint, and wrists. Benamour *et al*. reported 6 BD patients with destructive arthritis in a review of 340 BD patients, of whom 3 had erosive arthritis, including 2 mimicking RA (2). Other authors also described BD patients with erosive arthritis simulating RA during their disease course (3, 4). Although sacroiliac joint involvement and concurrent ankylosing spondylitis have occasionally been described in the BD literature (9), the discussion for those patients is excluded here.

The clinical manifestations of BD in the current patient were aggravated after dental treatment involving the extraction of some teeth, which seems to be associated with the activation of the immune mechanism by a sort of pathergy reaction. At the same time, BD patients have a significantly higher incidence of tonsillitis and dental caries when compared with healthy persons. Mizushima *et al*. described 2 patients whose severe symptoms of BD were induced after the dental treatment, suggesting the role of streptococcal infection in the oral cavity (10). In addition, although the arthritis could be an initial manifestation in BD, the current patient is reasonably assumed to have BD developed in a longstanding RA rather than arthritis as an initial manifestation of BD, based on symmetric and destructive longstanding arthritis of both wrists, the AAS, erosion of the odontoid process and atlas, and positive rheumatoid factor and DR4.

Table I. Previous reports of erosive arthritis in patients with Behçet's disease.

Authors	No. of pts.	Sites of erosive arthritis
Yurdakul *et al*. (1)	5	Calcanea, metatarsophalangeal joints, temporomandibular joints, proximal interphalangeal joints of feet
Benamour *et al*. (2)	3 (2*)	Proximal interphalangeal joints of feet, distal radius, capitate
Ben-Dov & Zimmerman (3)	1*	Proximal interphalangeal joints of hands
Jawad & Goodwill (4)	1*	Carpi
Mason and Barns (5)	1	Manubriosternal joint
Vernon-Roberts *et al*. (6)	2	Manubriosternal joint, hip
Shimizu *et al*. (7)	2	Terminal interphalangeal joints of feet, metatarsophalangeal joints
Kötter *et al*. (8)	1	Proximal interphalangeal joints of feet

*Condition mimicking rheumatoid arthritis.

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