

SHORT COMMUNICATION

Onset of Psoriatic Arthritis at the Hip Joint Without Spondylitis

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Psoriatic arthritis (PsA) is an inflammatory arthritis associated with psoriasis that may have an indolent or progressive course. Several factors can contribute to delay in diagnosis of PsA, including insidious onset, lack of symptoms, and absence of a specific diagnostic biomarker (1). The diagnosis of PsA is based on clinical evaluation and imaging, and may be difficult in patients with coexisting osteoarthritis, even for rheumatologists (2).

We describe here a rare case of PsA with hip joint involvement at onset. Inflammatory hip joint disease occurs in less than 10% of PsA patients, and involvement of the hip joint at onset is rare (3). In this case, inflammatory disease of the hip joints developed at a relatively young age with radiological evidence of erosion and ankylosis, requiring bilateral hip arthroplasty. Despite oral methotrexate treatment after left hip arthroplasty, computerized tomography revealed asymptomatic sacroiliitis. We suggest that psoriatic hip arthropathy may require early treatment with methotrexate or leflunomide along with intra-articular steroid injections, following anti-tumour necrosis factor alpha (anti-TNF α) therapy.

CASE REPORT

A 39-year-old Japanese man had a 9-year history of psoriasis vulgaris treated with oral etretinate at 30 mg daily and psoralen plus ultraviolet A radiation therapy. At onset of the skin eruption, he had right hip joint pain at rest and on ambulation, but had no limb or spinal pain. Initially, we suspected that his articular symptom was related to oral etretinate. Despite the cessation of oral etretinate, his joint pain did not improve. We referred the patient to a rheumatologist with suspected PsA or ankylosing spondylitis, but the consulting physician did not agree with our opinion. The hip joint pain worsened to such an extent that he required a cane to walk for a 2-month period. He had no symptoms in the peripheral joints or spine, and there was no evidence of enthesopathy. Plain

radiological examination and magnetic resonance imaging revealed erosion of the right caput ossis femoris (Fig. 1A). The patient was diagnosed with inflammatory hip joint disease associated with psoriasis and underwent total right hip arthroplasty. Histopathological examination of the excised tissue showed lymphocytic infiltration, with oedema and proliferation of small vessels, suggestive of synovitis (Fig. 1B). At that time, the hip joint disease was considered to be ankylosing spondylitis accompanied by psoriasis, and not PsA. After joint surgery, he was able to walk without the use of an aid. The patient declined anti-TNF α therapy and oral methotrexate because of the cost of treatment and inability to attend treatment sessions due to his work. Two years later, the psoriasis worsened with enlargement of the area of skin involvement (Fig. 2A), as well as pain and limitation of movement of the left hip and dactylitis of the toes (Fig. 2B). He was diagnosed with PsA and he agreed to a left hip arthroplasty (Fig. 3A) and was started on oral methotrexate (7.5 mg weekly), but he remained resistant to anti-TNF α therapy and further radiological examination. He did not have limb or spinal symptoms, but computerized tomography revealed sacroiliitis following left hip arthroplasty (Fig. 3B)

DISCUSSION

PsA mainly affects peripheral joints, axial joints and entheses, and the diagnosis is based on the exclusion of other inflammatory or degenerative diseases (4). PsA with involvement of the hip joint at onset without involvement of peripheral joints or axial disease is uncommon. The mean interval from the onset of arthritis to the appearance of hip joint symptoms was 11 years in PsA patients with hip joint disease (3). In the present case, our initial diagnoses were degenerative disease or joint disease related to oral etretinate, and ankylosing spondylitis, as involvement of the hip joint at the onset of PsA is uncommon, and peripheral and spinal diseases and enthesopathy was absent prior to the worsening of the hip joint pain (5–7). After left hip arthroplasty, the

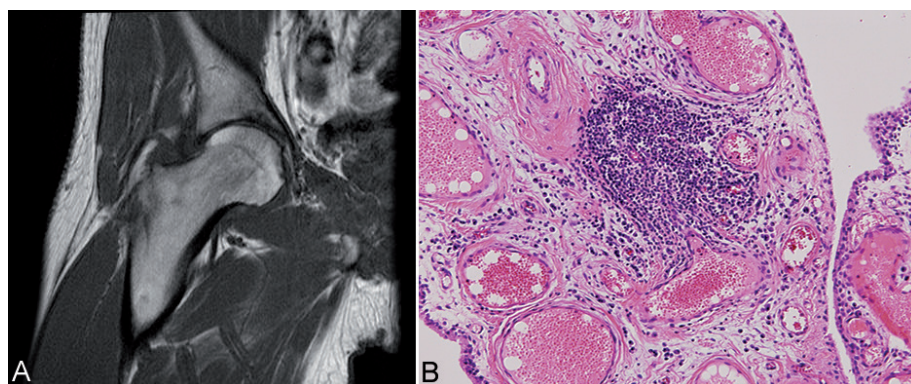


Fig. 1. (A) Magnetic resonance imaging showing erosion and inflammation in the right caput ossis femoris and acetabulum. (B) Histopathological examination of the excised tissue from the right hip joint showing infiltration of numerous lymphocytes and proliferation of dilated small vessels in the synovium, compatible with synovitis (haematoxylin-eosin \times 100).

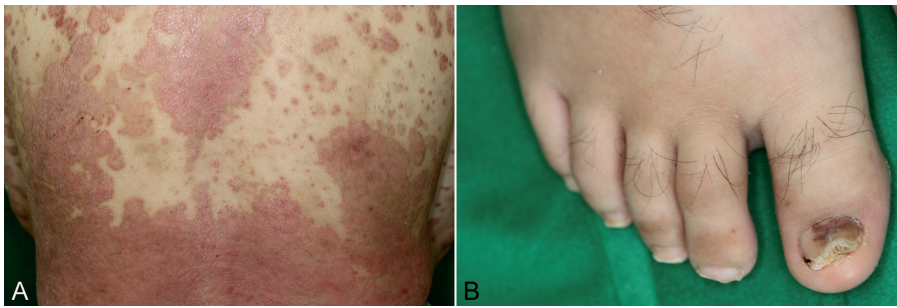


Fig. 2. (A) Enlargement and merging of the scaly erythematous plaques on the trunk. Dactylitis developed at the same time. (B) Dactylitis affecting the right second and fourth toes.

patient had dactylitis, inflammatory joint disease and radiological evidence of sacroiliitis, which led to the definitive diagnosis of PsA. Active inflammation of the hip joints is present in less than 10% of PsA patients at the onset of psoriasis (5), and destruction of the hip joint occurs in less than 1% of PsA patients (8). PsA patients with symptomatic hip joint disease typically have onset of PsA at a relatively younger age, and axial involvement, especially spondylitis with radiological evidence of sacroiliitis; however, our patient did not agree to further radiological examination of the spine and limbs (4). Surgical treatment is required for more than half of PsA patients with hip joint disease. Reports suggest that PsA patients with symptomatic hip disease may benefit from alternative treatments, such as anti-TNF α therapy (3, 9). Although our patient lacked axial disease and sacroiliitis prior to the hip arthroplasty, there was radiological evidence of progressive joint disease affecting both hip joints, which required bilateral hip arthroplasty. Despite administration of oral methotrexate, radiological evidence of sacroiliitis appeared. There is a general consensus that anti-TNF α agents should be considered if disease-modifying anti-rheumatic drug therapy alone fails. If severe, erosive polyarthritis or extra-articular manifestations, such as dactylitis, enthesitis or uveitis, are present, then biologic therapy may be indicated as anti-TNF α therapy to prevent progressive erosive bone disease (10). Although PsA presenting with hip joint disease is uncommon, bilateral hip involvement and rapid disease progression requiring hip arthroplasty are common outcomes. It has been reported that a proportion of PsA patients had hip joint disease within the first year after PsA onset (3), but this was not recognized in our case. The case of PsA with initial hip joint involvement

described here suggests that adequate diagnosis and treatment with methotrexate or leflunomide, along with intra-articular steroid injections, following anti-TNF α therapy, should be given at an early stage.

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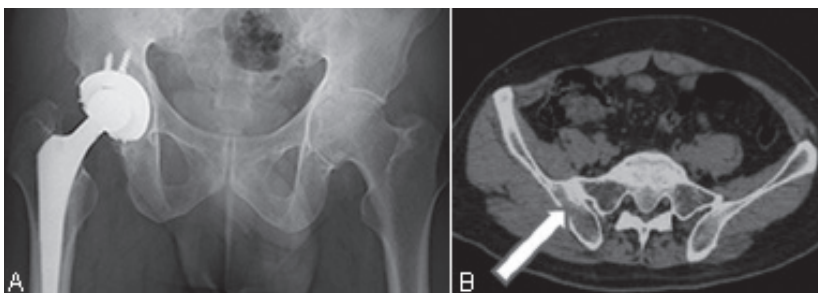


Fig. 3. (A) The hip joint radiography in supine position showing right hip arthroplasty, and erosion and ankylosis in the left caput ossis femoris and acetabulum. (B) Computerized tomography of pelvic in transverse plane showing right sacroiliitis after left hip arthroplasty.