

## Usefulness of Plain Film Radiography in the Diagnosis of Dactylitis by History-Taking

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Dactylitis or “sausage-like” digit is a typical manifestation of spondyloarthritis (SpA)<sup>1</sup>. Although more frequent in patients with psoriatic arthritis<sup>2</sup>, it has been observed in all forms of SpA including the undifferentiated ones<sup>1</sup>. In these latter cases, dactylitis usually occurs in association with the other clinical and radiologic manifestations of SpA. However, occasionally, dactylitis may for a long period be the only clinical manifestation of the B27-associated disease process. There is also a subset of patients with psoriatic arthritis with isolated peripheral enthesitis and/or dactylitis<sup>3</sup>. Our magnetic resonance imaging (MRI) studies revealed that both finger and toe dactylitis are due to flexor tenosynovitis, and that enlargement of the joint capsule is not required for producing the “sausage-like” feature<sup>4,5</sup>. The diagnosis of dactylitis is not difficult when the patient also

has the sausage-shaped digit at the time of the consultation because physical examination has the same high specificity and sensitivity as MRI<sup>4,5</sup>. Diagnosis by history-taking is more difficult, especially when dactylitis occurred many years before the consultation. In this case there are only 2 possibilities for diagnosing dactylitis. The first is to show a photograph of finger or toe dactylitis to the patient for confirmation. The second is to examine the routine radiograph obtained by the patient’s physician at the time of the sausage-like swelling. This second possibility is emphasized by the case report described here.

A 68-year-old man came to us in August 2000 for evaluation of pain in his knees and distal interphalangeal (DIP) joints of both hands. His history revealed that he had had psoriasis for 20 years. Five years after the onset of psoriasis



Figure 1. Plain film radiography of the right foot showing the “sausage-like” swelling of the second toe.

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he developed a sausage-shaped swelling of the second right toe that persisted for about 6 months. His family history showed that his father and daughter were suffering from psoriasis.

Physical examination showed typical signs of osteoarthritis (OA) in his knees and DIP joints, together with psoriatic skin lesions on his head, buttocks, and nails. Routine laboratory evaluation was normal and HLA typing showed A2, A3, B57, and B65. Recent knee and hand radiographs showed signs of OA. He also gave us the radiograph of his right foot obtained 15 years before, at the time of the sausage-like toe. It revealed the typical diffuse soft tissue swelling of SpA dactylitis in his second toe (Figure 1). A diagnosis of psoriatic arthritis with isolated dactylitis was made. Had he not brought the radiographs we should have not made the diagnosis.

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