

# Enthesitis and dactylitis in psoriatic arthritis

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Psoriatic arthritis (PsA) is a form of spondyloarthritis that classically develops in psoriasis, typically between the ages of 30 and 50 years, although it can present at any time. While most patients develop PsA after psoriasis (approximately 10 years later), some develop PsA before or concurrently with psoriasis. PsA manifests as peripheral arthritis, enthesitis, dactylitis, and spondylitis. Additional manifestations include nail lesions such as onycholysis and dystrophy (psoriatic onychodystrophy), pitting, and hyperkeratosis.<sup>1</sup>

Enthesitis and dactylitis are periarticular PsA manifestations that can be identified during clinical evaluation, and both are included in the Classification Criteria for Psoriatic Arthritis (CASPAR) as hallmarks of PsA<sup>2</sup>; however, these manifestations are frequently missed by dermatologists and rheumatologists. Enthesitis is present in 35% of patients with PsA, and dactylitis occurs in approximately 50% of patients with PsA.<sup>3,4</sup> These can be present in isolation for months to years in a small number of patients.<sup>5</sup>

Enthesitis can occur where tendons, ligaments or joint capsule insert into bones (Achilles heel, knee and spine). Symptoms include tenderness/ soreness/ pain at entheses (which may be elicited

via palpation) and potential visible signs, such as redness and swelling at insertion sites. The plantar fascia and Achilles tendon insertion sites are commonly affected.<sup>6</sup>

Dactylitis, or sausage-shaped digit is uniform swelling of the soft tissues between the metacarpophalangeal and proximal interphalangeal, proximal and DIP, and/ or Dip.<sup>7</sup> Digital tuft are diffusely swollen to the extent that the actual joint swelling could no longer be independently recognized. Clinically, dactylitis is recognized by swelling of an entire digit that is different from adjacent digits.<sup>8</sup> Swelling of the synovial sheaths often prevents flexion.<sup>9</sup>

Enthesitis can sometimes be difficult to distinguish from extra-articular pain (i.e. tender points) in fibromyalgia<sup>10</sup> and from joint pain associated with other rheumatic diseases, such as rheumatoid arthritis (RA).<sup>11</sup> However, dactylitis is not seen in fibromyalgia or RA, but can occur in gout, sarcoidosis, syphilis, tuberculosis, flexor sheath infections, and sickle cell disease.<sup>12</sup> The presence of enthesitis and dactylitis with additional clinical, laboratory, and imaging assessments can help distinguish PsA from other conditions with similar signs and symptoms.<sup>13</sup>

Conventional radiography, ultrasound (US), and magnetic resonance imaging (MRI) are used to assess PsA and its manifestations, including enthesitis and dactylitis. However, each modality has advantages and disadvantages and is capable of imaging different tissues and abnormalities.<sup>14,15</sup> Enthesitis severity is associated with radiographic peripheral and axial

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joint damage, and acute dactylitis is associated with greater radiographic damage.<sup>16</sup>

Enthesitis and dactylitis although can be challenging to detect, their identification is important for proper diagnosis and management of PsA. These result in greater disease activity and overall disease burden, poorer functional status, more pain and fatigue, and greater disability than PsA without these features.<sup>17</sup>

Radiographic progression in early PsA (less than or equal to 2 years from diagnosis) is substantial,<sup>18</sup> and a delay in treatment initiation may result in irreversible joint damage, with subsequent limitations in daily activities, increased disability, and reduced QoL.<sup>19</sup> Therefore, patients with psoriasis should be closely monitored for these two early manifestations of PsA (enthesitis and dactylitis), and receive proper treatment with therapies that inhibit radiographic progression and then refer patients to rheumatologists for collaborative care.

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