

Enthesitis as Primary Causal Factor of Developing Psoriatic Arthritis in Patients With Psoriasis

Fco J Navarro Blasco¹

¹Rheumatology Unit, Hospital General Universitario de Elche, Camino de la Almazara , 11, 03203 (Alicante)m Spain

***Corresponding author:** Fco. J. Navarro Blasco, Rheumatology Unit, Hospital General Universitario de Elche, Camino de la Almazara , 11, 03203 (Alicante), Spain, Email: antonio.navarroball@gmail.com

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Early therapeutic intervention of PsA is therefore crucial before the development of irreversible joint damage. Because psoriatic skin lesions generally precede the onset of PsA, dermatologists occupy an important position in treating patients with early PsA. This study aimed to evaluate the efficacy in treating joint disease in patients with PsA.

Bone marrow edema and periarticular inflammation, reflecting the presence of enthesitis [1].

To estimate the prevalence of ultrasonographic enthesitis in psoriasis patients with or without musculoskeletal symptoms and to investigate their evolution under systemic treatments given for the cutaneous symptoms.

We observed a high frequency of enthesitis in psoriasis patients, with or without musculoskeletal symptoms, requiring systemic treatment. One of these most recommended are adalimumab and ustekinumab a new biosimilar treatment. At 6 months using ustekinumab morphological abnormalities were likely to improve. Further studies would be interesting to validate our data and to assess their potential impact on PsA development [2].

Radiologic features of dactylitis included enhanced signal at digital entheses without accompanying synovitis or tenosynovitis. Histologically, finger and toe tissue exhibited hypervascular tenosynovium with a fibromyxoid expansion of fibrous tissue [3].

In order to other studies about enthesitis 55 psoriasis patients without any current or past symptoms of arthritis or enthesitis and 47 healthy controls were examined by high-resolution peripheral quantitative CT scans of the metacarpophalangeal joints. Number, size and exact localization of erosions and enthesiophytes were recorded by analyzing axial scans of the metacarpal heads and phalangeal bases and were confirmed in additional coronal and/or sagittal sections. In addition, we collected demographic and clinical data including subtype, duration and severity of psoriasis.

One of the most several important points if present, erosions were almost exclusively found at the radial side of the second metacarpal head in both psoriasis patients and healthy controls.

Psoriasis Patients Without PSA Show Substantial Signs of Enthesiophyte Formation Compared With Healthy Controls.

These changes represent new bone formation at mechanically exposed sites of the joint and substantiate the concept of the existence of a *Deep Koebner Phenomenon* at enthesial sites in psoriasis patients [4].

Enthesitis and dactylitis are cardinal manifestations of psoriatic arthritis (PsA), but a limited understanding of underlying pathophysiologic mechanisms has hindered development of targeted therapies.

Several different animal models reveal that cytokines in the interleukin-23/Th17 pathway and mechanical stress are key events in the development of enthesitis and dactylitis.

And enthesitis may be critical for the development of PsA, although a causal pathway remains unproven. Diagnosis is based on clinical and imaging assessments; however, Power Doppler ultrasound (PDUS) is more sensitive for diagnosis and longitudinal follow-up of enthesitis. Agents targeting tumor necrosis factor, interleukin-12/23, interleukin-17, interleukin-17 receptor (interleukin-17R) and PDE4 are effective therapies for psoriatic enthesitis and dactylitis.

Novel preclinical models established, for the first time, the importance of the interleukin-23/Th17 pathway and mechanical stress in pathogenesis of dactylitis and enthesitis. Advances in imaging, particular (PDUS), may improve sensitivity and specificity for diagnosis and longitudinal assessments. Many targeted therapies are effective for enthesitis and dactylitis [5].

Psoriatic arthritis (PsA) is a clinically diverse inflammatory arthritis that can affect peripheral joints and the axial skeleton. About 25% of psoriasis patients develop PsA and many suffer from reduced function and quality of life. Anti-TNF agents have emerged as a pivotal treatment for many patients but the lack of alternative biologics for those who become unresponsive and or

tolerate these medications remain a major unmet need. Recently, ustekinumab (UST) an agent that targets the 12 - 23/Th17 pathway was approved by the FDA for the treatment of active PsA.

Herein, we provide a comprehensive overview of the pharmacology and clinical efficacy and safety of UST in the treatment of PsA. In addition, the position of UST in the treatment of PsA is discussed.

The lack of alternative therapies for patients who cannot tolerate or fail anti-TNF agents remains a major challenge for clinicians who treat PsA. UST, an agent that has proven efficacy in psoriasis, has recently been shown to also be effective for a number of the manifestations associated with PsA, including peripheral arthritis, dactylitis and enthesitis. This agent also inhibits radiographic progression. FDA approval of UST provides a much needed addition to the treatment options for the heterogeneous clinical features of PsA [6].

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