Stopping the march: Can effective treatment of psoriasis prevent progression to psoriatic arthritis?

June 12 2024

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Psoriatic arthritis (PsA) is a chronic inflammatory arthritis which appears in around one-third of people with psoriasis. EULAR—The European Alliance of Associations for Rheumatology—is committed to reducing the impact of rheumatic and musculoskeletal diseases on both the individual and society. At the 2024 EULAR congress, new data suggests it could be possible to prevent the evolution from skin psoriasis to PsA.

The estimated prevalence of psoriatic arthritis (PsA) in people with psoriasis ranges widely—between 6% and 42%—but in most cases, skin symptoms precede PsA, thus making skin psoriasis a model for pre-PsA. Assuming that there are shared pathways in the pathogenesis, it is possible that stringent treatment of moderate-to-severe psoriasis could reduce progression to clinically overt PsA. Biologic treatments are effective at controlling psoriasis, but there is no conclusive data that these treatments help prevent people from developing PsA. Several risk factors for transition have previously been identified by a EULAR taskforce. Identifying a profile of those psoriasis patients likely to go on to develop joint involvement is key to the idea of intercepting PsA.

This retrospective study used Big Data from a global network of electronic records—making it possible to look at over 1 million people with psoriasis to compare the incidence of new-onset PsA between those receiving a first- or second-line biologic for psoriasis. This included tumor necrosis factor inhibitors (TNFi) and biologics directed against interleukins (IL-12i, -23i, -17i, and -12/23i). The incidence of PsA was compared in the different cohorts at 5 years, and throughout the follow-up, using the first-line TNFi population as a comparator.

The results showed that the risk of developing PsA during first-line treatment was 37% lower with an IL-12/23i, and 39% lower with IL-23i

compared to TNFi at 5 years. For those on second-line treatment, the risk was 32% lower with IL-12/23i and 31% lower with IL-23i at 3 years than with a first-line TNFi. In both first- and second-line treatment, IL-23i presented a 47% lower probability of developing PsA compared to IL-17i at 3 and 5 years.

These kinds of analyses based on Big Data offer an opportunity to obtain information on the efficiency of drugs in real life. This large study is relevant because it explores the incidence of PsA in matched, adjusted cohorts with a 5-year follow-up. According to this data, IL-12/23i and IL-23i reduce the incidence of PsA compared to TNFi and IL-17i, both in naïve and bio-experienced patients. As more knowledge becomes available, the concept of intercepting PsA before it becomes clinically apparent becomes a possibility.

More information: B. Joven-Ibáñez et al, OP0010 Evaluation of the risk of psoriatic arthritis in patients with psoriasis undergoing biological treatment. Global population study (TRINETX), *Scientific Abstracts* (2024). DOI: 10.1136/annrheumdis-2024-eular.5872

Provided by European Alliance of Associations for Rheumatology (EULAR)