



PSORIASIS

## IL-23/TH17 TARGETED THERAPIES IN SAPHO SYNDROME. A CASE SERIES

*F Aubin<sup>(1)</sup> - D Wendling<sup>(2)</sup> - Franck Verhoeven<sup>(3)</sup> - C Prati<sup>(3)</sup>*

*University Hospital, Dermatology, Besancon, France<sup>(1)</sup> - University Hospital, Rheumatology, Besancon, France<sup>(2)</sup> - Verhoeven, Rheumatology, Besancon, France<sup>(3)</sup>*

**Background:** SAPHO syndrome is a rare entity with skin and rheumatologic inflammatory presentation. The treatment is not standardized, and in case of inadequate response to anti-inflammatory drugs, the use of anti-TNF or anti-IL-1 biologic treatments has been reported. The IL-23/Th17 axis may be involved in SAPHO syndrome.

**Observations:** We report the results of six courses of IL-23 and IL-17 targeted therapies (3 ustekinumab and 3 secukinumab) in patients with SAPHO syndrome unresponsive to previous disease-modifying antirheumatic drugs. With a mean treatment duration of 5.5 months, improvement of skin symptoms was noticed in three cases, one improvement with secukinumab and two remissions (one with secukinumab, one with ustekinumab). Regarding the rheumatic symptoms, no major improvement was obvious under any of the six treatment courses. No particular safety concerns were reported, except cases of paradoxical psoriasis flare in one under ustekinumab and the other case under secukinumab.

**Key message:** To the best of our knowledge, this is the first study reporting evaluation of IL-23/Th17 blockade in a series of patients with SAPHO syndrome. Only two cases of SAPHO syndrome treated with ustekinumab are available in the literature with improvement in skin and musculoskeletal symptoms. There are no published data available upon anti-IL17 efficacy in this condition. The IL-23/Th17 axis may be involved in SAPHO syndrome. It has been shown that TH17 cells are increased in the peripheral blood of patients with SAPHO syndrome, whereas in another study, no demonstration of increase of IL-23 or correlation with disease activity was found in a group of 22 cases of SAPHO syndrome, compared to controls, ankylosing spondylitis and psoriatic arthritis. IL-17 is also able to promote osteogenesis under inflammatory conditions and therefore may contribute to the hyperostosis pattern of SAPHO. Further report are required to assess the potential benefit of targeting IL-23/Th17 in SAPHO syndrome.

