

NOVEL TREATMENT APPROACHES IN REACTIVE ARTHRITIS: CLINICAL AND CYTOKINE RESPONSES TO IGURATIMOD 25 MG COMPARED WITH BIOLOGIC AND CONVENTIONAL THERAPIES

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Background: Reactive Arthritis (ReA) is an immune-mediated form of spondyloarthritis, often triggered by genitourinary or gastrointestinal infections. Current therapeutic strategies rely mainly on NSAIDs and cs-DMARDs, with biologics reserved for refractory disease. However, limited progress has been made in exploring novel targeted agents. Iguratimod 25 mg, an oral immunomodulatory drug approved for rheumatoid arthritis in Asia, has demonstrated anti-inflammatory and cytokine-suppressive properties, but evidence in ReA is scarce.

Objectives: To evaluate the clinical efficacy and cytokine-modulating effects of Iguratimod 25 mg in patients with Reactive Arthritis compared to conventional and biologic therapy.

Methods: A 26-week prospective study was conducted in 60 patients with ReA. Participants were divided into three groups: (1) Iguratimod 25 mg + sulfasalazine (n=20), (2) adalimumab 40mg/0,4 ml (n=20), and (3) sulfasalazine 2.0 g monotherapy (n=20). Clinical outcomes (BASDAI, ASDAS-CRP, HAQ, RAPID3), laboratory markers (CRP, ESR), and proinflammatory cytokines (IL-17A, TNF- α) were assessed at baseline, week 13, and week 26.

Results: At week 26, adalimumab achieved the highest remission rate (63%), with marked reductions in CRP (-18.2 mg/L), IL-17A (-41%), and TNF- α (-47% , $p<0.01$). Iguratimod 25 mg showed significant improvements over sulfasalazine monotherapy: BASDAI reduction (-3.4 ± 0.8 vs. -1.7 ± 0.6 , $p<0.01$), ASDAS-CRP decrease (-1.6 ± 0.4 vs. -0.8 ± 0.3 , $p<0.05$), CRP decline (-12.6 mg/L), IL-17A reduction (-28%), and TNF- α suppression (-35% , $p<0.05$). Functional outcomes improved in 58% of Iguratimod patients versus 31% in the sulfasalazine group. Iguratimod was generally well tolerated, with transient liver enzyme elevations as the most frequent adverse event.

Conclusions: Iguratimod 25 mg demonstrates meaningful clinical and cytokine-modulating effects in Reactive Arthritis, offering superior outcomes to cs-DMARD monotherapy and approaching those of biologic therapy. These findings highlight Iguratimod as a promising emerging therapy for ReA, warranting validation in larger controlled trials.