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CARDIAC AND HEPATIC SIDE EFFECTS OF LEFLUNOMIDE IN RHEUMATOID ARTHRITIS

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Abstract

Introduction. Rheumatoid arthritis is a chronic inflammatory disease, of unknown etiology and autoimmune pathogenesis, accompanied by joint destruction processes and severe motor disability over time.
The objectives of the study were to identify possible cardiac and hepatic adverse events in Wistar rats with Leflunomide treatment in a model of chronic arthritis carrageenan-induced.
Discussion. The Leflunomide action mechanism is based on blocking the proliferation of lymphocytes by inhibiting dihydro-orotate-dehydrogenase which has a role in the de novo synthesis of the pyrimidine base. They serve as precursors for the synthesis of nucleic acids but also for the biosynthesis of cell membranes. Leflunomide inhibits not only lymphocyte proliferation but also the formation of arachidonic acid derivatives, cytokine production, inhibits TNFα, inhibits COX2, both in vivo and in vitro. Leflunomide it is rapidly and almost completely metabolized in its active form A771726 in the intestine and liver. The bioavailability of Leflunomide in humans has not been studied.
Conclusions. Liver damage was extremely intense (lipid dystrophy, apoptosis, inflammatory infiltrate in the portal spaces). For the first time in the literature, I have discovered and highlighted the toxic effect of Leflunomide on the heart (necrotic myocardial fibers - Lie + coloration).
Key words: *Rheumatoid arthritis, liver, hart, Leflunomide*