EFFICACY AND SAFETY OF SIMVASTATIN IN UVEITIS ASSOCIATED WITH HLAB27 AND/OR RHEUMATIC DISEASES: A RANDOMIZED, OPEN-LABEL STUDY

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Introduction: Statins have been shown to reduce ocular inflammation in animal models and to prevent development of uveitis in observational studies. There have been no experimental human studies evaluating statins efficacy and safety in uveitis.

Aim: To investigate the efficacy and safety of simvastatin in patients with uveitis associated with HLAB27 and/or rheumatic diseases.

Methods: For this single-center, open-label, randomized study, we enrolled patients with acute uveitis, associated with HLAB27/rheumatic diseases. The patients were randomized to receive 40 mg simvastatin per day for 2 months with the local anti-inflammatory treatment or local anti-inflammatory therapy alone. The studied outcomes were: visual acuity (letters score) conjunctival injection (grades 1-5) and anterior chamber reaction (grades 1-5), the frequency of visual field impairment and posterior synechia. Generalized estimating equations were used to model the relationship between simvastatin use by time interaction and changes in the outcome measures.

Results: Forty five patients were enrolled in the study. Twenty two (49%) of them were positive for HLA-B27 without extraocular manifestations, 18 (40%) had concomitant seronegative spondyloarthritis, 4 (9%) had juvenile idiopathic arthritis and 1 (2%) was diagnosed with Behcet’s disease. Twenty nine (64%) patients had intermediate uveitis, 13 (29%) anterior uveitis and 3 (7%) panuveitis. Twenty two patients were randomly assigned to receive simvastatin with local treatment and 23 to local treatment alone. Simvastatin was associated with significant improvement in visual acuity, conjunctival injection, and anterior chamber reaction. In patients treated with simvastatin the rates of posterior synechia and visual field impairment were less than in control group (Table). The treatment was well tolerated, only mild side effects were observed.

Conclusions: Our findings suggest that statins may have therapeutic potential in uveitis. These results should be confirmed in a double blind, randomized, controlled study.