ANTIBIOTICS FOR REACTIVE ARTHRITIS

Several species of bacteria, including *Chlamydia trachomatis* and, less frequently, *Chlamydophila (Chlamydia) pneumoniae*, are known to trigger reactive arthritis. Although the effectiveness of long-term antibiotic therapy in patients with reactive arthritis is controversial, these two organisms exist in a state of persistent, metabolically active infection in the synovial tissue, thus rendering them particularly susceptible to antimicrobial agents. A study by Carter *et al.* investigated whether a 6-month course of combination antibiotics is effective in patients with chronic, *Chlamydia*-induced reactive arthritis.

The prospective, multicenter, double-blind, placebo-controlled study included 42 patients (57% men, mean age 45.9 years) with mean disease duration >10 years. Participants were randomly allocated to receive doxycycline plus rifampicin ($n=12$), azithromycin plus rifampicin ($n=15$), or placebos ($n=15$). Use of additional long-term medications (corticosteroids, NSAIDs, DMARDs and biologic agents) was permitted.

The primary outcome measure—≥20% improvement in at least 4 out of 6 variables (swollen and tender joint counts and 4 questionnaire components assessing low-back morning stiffness, low-back and peripheral pain, and global disease activity) without worsening of any variables—was achieved in 17 (63%) of 23 patients receiving active treatment versus 3 (20%) of 15 patients in the placebo group ($P=0.01$). At 6 months, 5 of the 6 variables had improved considerably from baseline in the active treatment groups, compared with none in the placebo group.

The authors conclude that combination antibiotic therapy can potentially eradicate persistent *Chlamydia* infection in these reactive arthritis patients. Further study is needed to find the optimal antibiotic combination and dosing regimen in this setting.

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