The Efficacy of Levofloxacin or Ciprofloxacin in Management of Chronic Non-Bacterial Prostatitis

Introduction and Objective: To evaluate efficacy of 6-week levofloxacin and ciprofloxacin in patients with chronic non-bacterial prostatitis (CNBP) and to compare the result with the control group.
Materials and Methods: Male patients with CNBP, based on criteria of National Institutes of Health (NIH),were randomized to groups of 6-week levofloxacin (500mg daily, group 1), ciprofloxacin (250mg twice daily, group 2) and ciprofloxacin (500mg twice daily, group 3), and control group (no antibiotics, group 4). NSAIDs (diclofenac 500mg) twice daily and alpha-blocker (tamsulosin 0.2mg) twice daily were prescribed for all patients. Effects of treatment were assessed at 3, 6 weeks after medication according to the National Institutes of Health Chronic Prostatitis Symptoms Index (NIH-CPSI).
Results: There were 215 patients randomized into 4 groups (51 in group 1, 53 in group 2, 61 in group 3, and 50 in group 4). The NIH-CPSI score revealed statistically significant differences among group 1, group 2, group 3 and group 4 at the 3-week assessment (P=0.01). At the 6-week assessment, there was no significant differences between group 2 and group 4 (P>0.05). Statistically significant differences were found among group 1, group 3 and group 4 (P<0.001). The NIH total score and three major domains were significantly different between group 1 and group 3 at the 3- and 6-week assessment. (P=0.01) But the difference between group 2 and group 3 at the end of treatment was not significant (P=0.05).
Conclusion: Levofloxacin reduces NIH-CPSI scores more in patients with CNBP compared to ciprofloxacin. Levofloxacin was superior to ciprofloxacin in decreasing NIH-CPSI scores.