Effect of BPH Treatment with Alfuzosin on the Quality of Micturition, Erectile Function and Ejaculation in Relation to Late-Onset Age-Related Hypogonadism

Introduction and Objective: The aim of this study was to assess urination improvement by Alfuzosin and sexual function disorders in association with acquired hypogonadism.
Materials and Methods: We examined 40 patients with symptomatic BPH treated with 10 mg/day of Alfuzosin. In all patients the total testosterone level was determined. The efficiency of the therapy was assessed using the IPSS and MSHQ questionnaires at baseline and following 4, 12, and 24 weeks of treatment.
Results: All patients were divided into 3 groups: normal level (>12 nmol/l) - 32.5% of all patients (Group 1), testosterone within the grey zone (8-12 nmol/l) – 30.0% (Group 2), and biochemical hypogonadism– 37.5% (Group 3). The mean testosterone levels in these groups were 16.3±1.32, 11.1±0.79, and 6.9±0.84 nmol/l, respectively. We noted the consistently higher baseline average IPSS scores in the group 3 patients in comparison with Groups 1 and 2 (19.1±1.7 against 15.9±0.11 and 15.4±1.3 respectively). In all three groups, the mean serum testosterone levels consistently decrease, starting from Week 4 and until Week 12, (3.5±0.48, 4.5±0.83, and 6.4±0.32 respectively). At Week 24 the Groups 1 and 3 patients showed a slight tendency toward increase of the mean IPSS score (4.1±0.42 and 7.4±1.8 respectively), while in Group 2 this score continued to decrease (3.8±0.72). The Group 3 patients showed consistently lower average MSHQ erectile function scores, both before the treatment (6.2±1.14 against 8.9±1.01 and 8.7±0.93 in Groups 1 and 2 respectively, $p<0.05$), and at Week 24 of therapy (10.2±1.72 against 12.4±1.14 and 13.0±1.64 in Groups 1 and 2, respectively, $p<0.05$). The MSHQ ejaculation score in Group 3 patients was consistently lower in comparison with the other groups before the treatment (16.3±1.92 against 21.4±2.14 and 22.1±2.21 in Groups 1 and 2 respectively, $p<0.05$). At Week 24 of therapy, the mean score in Group 3 (18.9±1.84) remained at 21.6% and 27.5% lower than that in Groups 1 and 2 (26.1±2.41 and 25.3±2.62 respectively).
Conclusion: More pronounced LUTS, and lower erectile and ejaculation functions were found in the patients with BPH and biochemical hypogonadism. The BPH therapy is most effective in males with normal testosterone levels or with testosterone values within the grey zone.