HBX-7, A NEWLY COMBINED HERBAL REMEDY, SUPPRESS TESTOSTERONE-INDUCED BENIGN PROSTATE HYPERPLASIA

[1]BO-RAM JI, [2]TAE-YOUNG GIL, [3]HYO-JIN AN

Department of Pharmacology, College of Korean Medicine, Sang-ji University, Wonju-si, Gangwon-do 26339, South Korea

Objectives: The aim of this study was to simplify and visualize the contents of HBX-6. This study was carried out to evaluate the anti-proliferative effects of HBX-7 in testosterone-induced benign prostatic hyperplasia (BPH) mice model.
Methods: Cell viability was determined by MTT assay in RWPE-1 and WPMY-1 cells. The expression of androgen receptor (AR) was measured in dihydrotestosterone-stimulated RWPE-1 and WPMY-1 cells. Based on results and clinical experiences, we selected Cornus officinalis, Psoralea corylifolia and Cistanche deserticola and reconstisuted agent, HBX-7. BPH was induced in the mice by intramuscular injection of testosterone propionate. Animals were divided into six groups: Group 1, control group; Group 2, BPH-induced group; Group 3, BPH-induced group treated with finasteride; Group 4, BPH-induced group treated with HBX-6; Group 5 – BPH-induced group treated with HBX-7 100mg;kg; Group 6 – BPH-induced group treated with HBX-7 200mg/kg. Change of prostate weight was measured and thickness of the epithelium was evaluated by H&E staining. The expression of prostate proliferation and cell cyle relative proteins were determined by Western blot analysis.
Conclusion: Taken together, a newly combined herbal agent,HBX-7 suppressed pathological alterations of BPH and showed a marked reduction of proliferation-relative protein expression compared with the BPH group. These results appear that HBX-7has therapeutic effect in BPH murine model as well as existing agent HBX-6 and finasteride, suggesting the role of HBX-7 as substitutes for BPH remedial agent. This research was supported by a grant of the Korea Health Technology R&D Project through the Korea Health Industry Development Institute (KHIDI), funded by the Ministry of Health &Welfare, Republic of Korea (grant number: HI16C0477)