allied academies

8th International Conference on

TRADITIONAL MEDICINE AND ACUPUNCTURE

July 23-24, 2018 | Rome, Italy

Arch Gen Intern Med 2018, Volume 2 | DOI: 10.4066/2591-7951-C1-003

LYCIUM CHINENSE MILL IMPROVES HYPOGONADISM VIA ANTI-OXIDATIVE STRESS AND ANTI-APOPTOTIC EFFECT IN OLD AGED RAT MODEL

Woong Jin Bae
The Catholic University of Korea, Korea

To evaluate the pharmacological effects of goji berry (*Lycium chinense* Mill) in an animal model of late onset hypogonadism (LOH). 18-month-old 30 male Sprague-Dawley (SD) rats were used as the LOH aged rat model. Rats were divided into five groups: a control group (n=6), low concentration goji berry extract group (150 mg/kg/day) (n=6), high concentration goji berry extract group (300 mg/kg/day) (n=6), low concentration goji berry complex extract group (150mg/kg/day) (n=6), and high goji berry complex concentration extract group (300 mg/kg/day) (n=6). After six weeks of treatment, sperm counts and motility, serum testosterone level, androgen receptor (AR) expression, oxidative stress marker, and apoptotic factors were examined. Goji berry extracts increased testosterone level to 2.07±0.06 p mol/L in the goji berry 150mg/kg group, 2.39±0.08 pmol/L in the goji berry 300 mg/kg group, 2.97±0.03 pmol/L in the goji berry complex 150 mg/kg group, and 3.34±0.04 pmol/L in the goji berry complex 300 mg/kg group compared to 1.86±0.03 pmol/L in the control group, respectively ($p<0.05$). AR expressions were increased in testis tissue significantly but were not significant in prostate tissue. Goji berry might improve LOH by reversing testicular dysfunction via an anti-oxidative stress mechanism without inducing prostate disease.

bwoong@catholic.ac.kr

Note: