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# ANTI-INFLAMMATORY AND ANTI-NOCICEPTIVE EFFECT OF KOREAN RED GINSENG CAPSULE ON CHRONIC CYSTITIS

## Hypothesis / aims of study

Korean red ginseng extract is known to be effective to enhance immunity and has anti-inflammatory reaction. In this study, we aimed to investigate the effect of oral administration of red ginseng capsule for managing symptoms of chronic cystitis and disease related quality of life.

## Study design, materials and methods

Subjects were all females and they were enrolled in two groups; healthy control group (n=20,mean age 57.0±2.14 (46-85) years old) and chronic cystitis group(n=26, mean age 59.2±2.60 (33-76) years old) with symptom recurrence more than twice within last 6 months. Chronic cystitis group patients had taken 2 red ginseng capsules t.i.d for 8 weeks. Urinalysis, urine culture, symptom questionnaire associated with UTI symptoms (UTISA), urine NGF expression, symptoms recurrence episodes were collected and analyzed in all subjects.

### Results

In UTISA questionnaire, chronic cystitis group showed significant improvement after 8 weeks red ginseng administration. There was no break through infection during the test period. However, urine NGF expression did not show any significant difference between control and cystitis group (control  $0.3 \pm 0.11(0.20-0.39)$ ng/mL; chronic cystitis baseline  $0.30 \pm 0.08(0.17-0.45)$  ng/mL; post treatment  $0.28 \pm 0.04$  (0.21-0.35) mg/mL, p=0.57, ANOVA).

## Interpretation of results

After 8 weeks administration of Korean red ginseng, patients' subjective symptom and quality of life showed improvement. In this study, red ginseng administration did not alter the expression of urinary NGF suggesting that red ginseng may not directly affect NGF expression, but may enhancing more systemic homeostasis.

## Concluding message

Although urinary NGF did not show any significant difference with red ginseng administration, red ginseng administration gave subjective improvement with improvement of general well-being.

Specify source of funding or grant	Korean Red Ginseng Society
Is this a clinical trial?	Yes
Is this study registered in a public clinical trials registry?	No
Is this a Randomised Controlled Trial (RCT)?	Yes
What were the subjects in the study?	HUMAN
Was this study approved by an ethics committee?	Yes
Specify Name of Ethics Committee	Ewha Clinical Trial Center Ethics Committee
Was the Declaration of Helsinki followed?	Yes
Was informed consent obtained from the patients?	Yes