9. Cardiovascular Diseases

Reference

1. Objectives
To evaluate the effect of ginseng on the blood pressure in hypertensive patients.

2. Design
Double-blinded randomized controlled trial (DB-RCT).

3. Setting
One Oriental hospital (Kyunghae University Medical Center), Republic of Korea.

4. Participants
Subjects with prehypertension and stage 1 hypertension diagnosed using 24-hour ambulatory blood pressure monitoring (n=123).

5. Intervention
Arm 1: Korean ginseng treatment (n=22).
Arm 2: Chinese ginseng treatment (n=25).
Arm 3: American ginseng treatment (n=24).
Arm 4: Korean red ginseng treatment (n=25).
Ginseng was administered in capsules, and the treatment was for 4 weeks, 3 times a day, 4 capsules per dose.
Twenty seven subjects dropped out during the study.

6. Main outcome measures
Ambulatory blood pressure measured over a 24-hour period.
Symptoms related to the hypertension (headache, nuchal pain, and hot flush) assessed on a visual analogue scale.

7. Main results
1) Treatment significantly decreased systolic blood pressure in Arm 2 (P<0.05) and diastolic blood pressure in Arm 1 (P<0.05), but there were no between-group differences in pre- to post-treatment change in blood pressure.
2) Blood pressure variability and average real variability in diastolic blood pressure decreased significantly in Arm 2.
3) The above symptoms related to hypertension decreased significantly in all subjects (P for headache or hot flush, headache, and hot flush: <0.001, <0.001, 0.043, respectively), especially in Arm 1.

8. Conclusions
All the ginsengs significantly decrease blood pressure and hypertension-related symptoms, but no ginseng is more effective than the others.

9. Safety assessment in the article
There were no abnormal laboratory findings (liver and renal function tests) and no adverse effects of treatment.

10. Abstractor’s comments
Ginseng is thought to increase metabolic rate, but symptoms such as headache, nuchal pain, and hot flush were significantly decreased in this study. Treatment decreased blood pressure regardless of the kind of ginseng, and there were no significant between-group differences. The hypertension was not ‘cured’ in the short term, so that additional analysis and further large-scale clinical trials will be needed.

11. Abstractor
Go HY, 18 July 2010.