

Sexual function

How Korean Red Ginseng could be a useful agent for treating male infertility



Background



Theory

The effect of Korean red ginseng (KRG) on male infertility:

Many empirical treatments have been used to improve the quality and concentration of sperm, although good results have not been achieved. Several studies have also reported that ginseng improves spermatogenesis in animals. These effects were probably caused by anti-oxidant and anti-aging actions, as well as modulation of the hypothalamuspituitary-testis axis. This study was to investigate the effects of KRG on semen parameters in male infertility patients.



Method

A randomized, double-blind, placebo-controlled study:

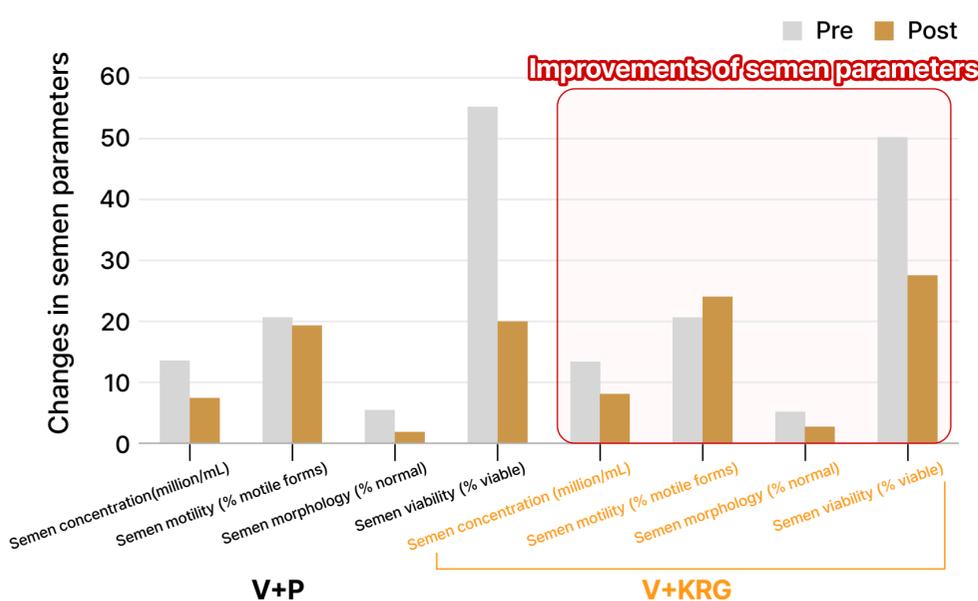
A total of 80 male infertility patients with varicocele were recruited and divided into the following four groups: non-varicocelectomy (V)+-placebo (P) group, V+P group, non-V+KRG group (1.5-g KRG daily), and V+KRG group (1.5-g KRG daily). Semen analysis was performed and hormonal levels were measured in each treatment arm after 12 weeks.



Outcome

With infertility patients with males (25–45 years of ages) into non-V+P, V+P, non-V+KRG, V+KRG groups

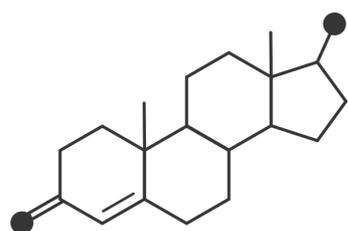
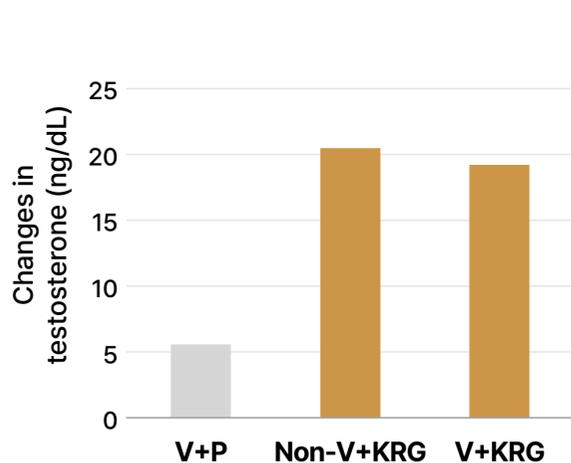
Semen parameters



After 12 weeks, KRG improved the semen parameters ($P < 0.05$), whose improvements were significant comparing with Non-V+P group.

Semen analysis for sperm concentration, percent motility, viability and Kruger/strict morphology using World Health Organization methodologies (4th edition).

Hormonal parameters

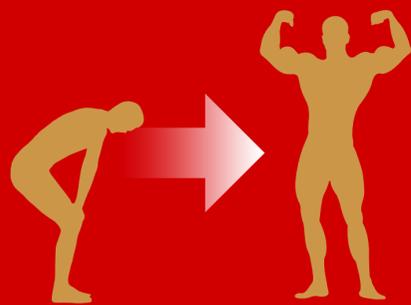


V+KRG group showed slight increases in serum testosterone levels (the changes were not significant).

Testosterone is a hormone produced in men by the testes, being involved in muscle and bone development, hair growth, and development of sex organs such as the penis and prostate. It contributes to a man's sense of overall well-being and sexual function. Testosterone is also required for sperm production.

Adverse events were mild and resolved spontaneously by the end of the trial. Most of the events were assumed to be unrelated to the trial.

Impact



Improvement of spermatogenesis by Korean Red Ginseng

KRG-treated groups with or without varicocelectomy showed significantly improved semen parameters in terms of sperm concentration, viability, motility, and morphology.

Conclusion

The benefit of Korean Red Ginseng on male infertility

As the treatment with KRG for 12 weeks enhanced spermatogenesis, **KRG may be a useful agent for the treatment of male infertility.**