

H. pylori

How Korean Red Ginseng could be useful in the treatment of H.pylori-associated halitosis



Background



Theory

The effect of Korean red ginseng (KRG) on Helicobacter pylori (H. pylori) eradication:

Previous studies have suggested that KRG 1) inhibits H. pylori colonization, 2) exhibits antioxidative and anti-inflammatory effects, 3) provides efficient restorative action, 4) inhibits expression of genes associated with generation of volatile sulfur compounds, and 5) increases eradication rates. This study was performed to evaluate whether PPI-based triple therapy with KRG can enhance H. pylori eradication and reduce levels of halitosis-associated volatile sulfur compounds.



Method

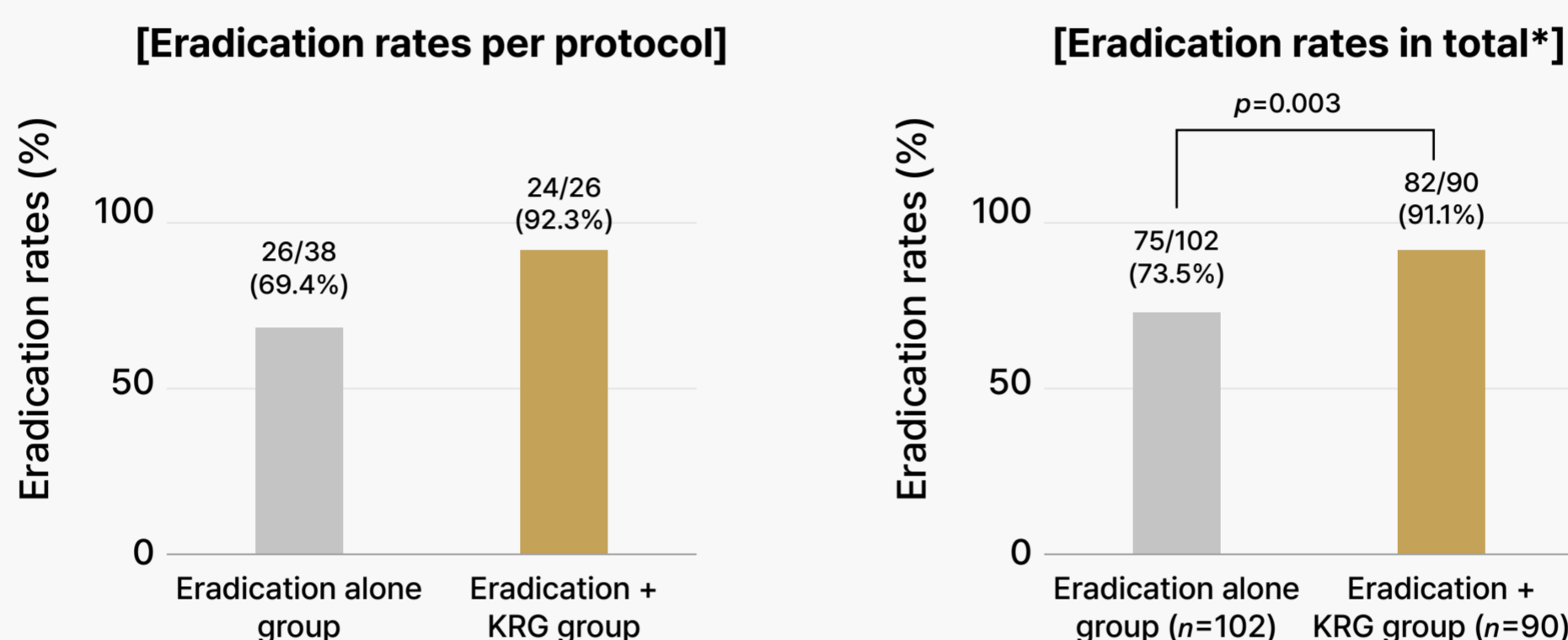
76 patients were randomized into an eradication regimen-only group (n=45) or an eradication + KRG group (n=31). The eradication regimen consisted of PPI b.i.d., clarithromycin 500 mg b.i.d., and amoxicillin 1 g b.i.d. for 7 days. A total of 2.7 g of KRG capsules were given per day, each dose consisting of 3 capsules, t.i.d., for 10 weeks. 13C-urea breath test and halimeter measurements were performed prior to protocol repetition.



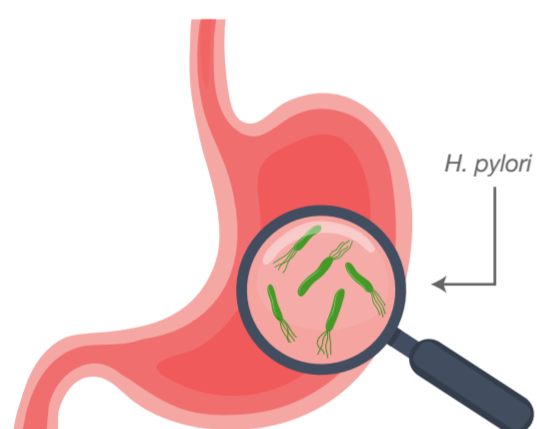
Outcome

With 76 individuals with dyspepsia and indigestion (Eradication alone (n=45), Eradication + KRG (n=31))

H. pylori eradication rates



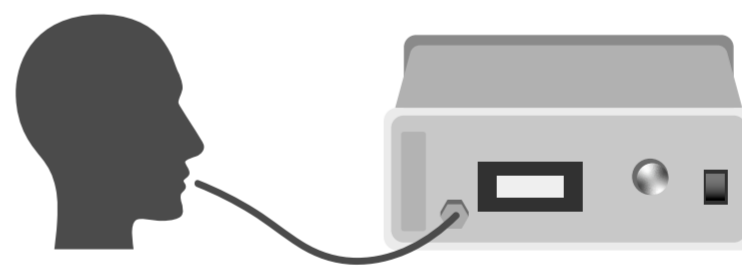
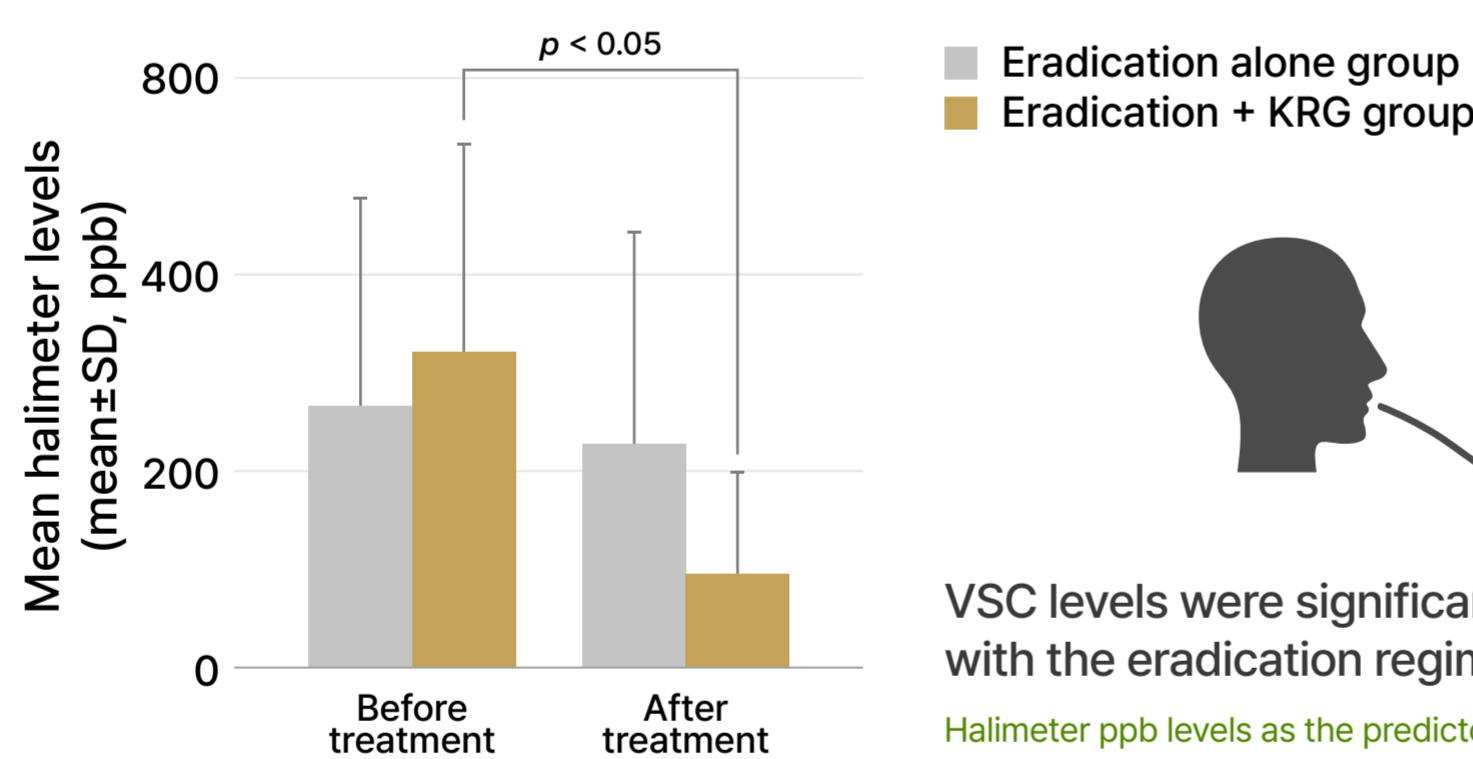
*Cumulative results of eradication rates according to the group from previous 3 clinical trials.



- Successful eradication of H. pylori was achieved in 24 out of 26 patients (92.3%) in KRG group, which was significantly higher than in the eradication-only group (p<0.05).
- When clinical trial data are combined, KRG supplementation significantly augmented the eradication rates (p<0.005).

An eradication rate for the treatment was calculated as the number of patients with a confirmed negative test following treatment divided by the total number of patients treated.

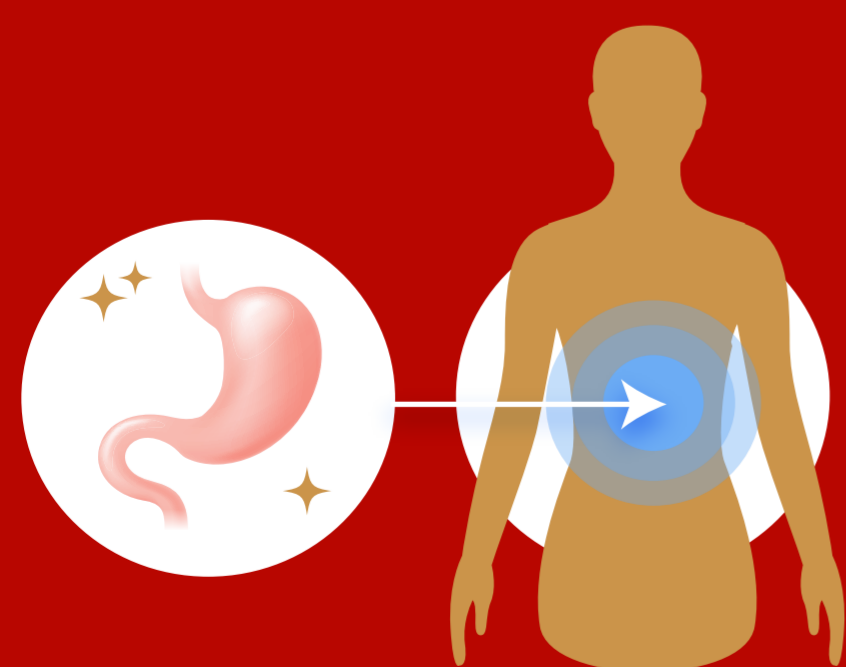
Mean halimeter (VSC, volatile sulfur compound) levels



VSC levels were significantly decreased in subjects treated with the eradication regimen plus KRG (p<0.05).

Halimeter ppb levels as the predictor of erosive gastroesophageal reflux disease.

When we analyzed how many patients were ppb<100 according to group, the number of patients in the KRG group was higher than that in the eradication alone group in these goals. All subjects who received Korean red ginseng supplementation showed a decrease in VSC level of >30%, compared with only 52.9% of those who did not (p<0.05).



Impact



Effect of Korean Red Ginseng on H.pylori

Supplementation of triple therapy with Korean red ginseng increased H. pylori eradication rates and significantly reduced VSC levels in gastric juice.

Conclusion

The benefit Korean Red Ginseng on H. pylori eradication

Korean red ginseng along with triple therapy **increased the H. pylori eradication rate and led to significant reductions in VSC levels, suggesting the usefulness of Korean red ginseng in combating H. pylori infection (treatment of H. pylori-associated halitosis).**