

**5. Psychiatric/Behavioral Disorders****Reference**

Sato Y, Horita H, Adachi N, et al. Effect of oral administration of prostaglandin E1 on erectile dysfunction. *British Journal of Urology* 1997; 80: 772-5.

**1. Objectives**

To compare the efficacy and safety of limaprost, an oral prostaglandin E1 derivative, with those of goshajinkigan (牛車腎気丸) in the treatment of erectile dysfunction.

**2. Design**

Quasi-randomized controlled trial (quasi-RCT).

**3. Setting**

Not mentioned (the authors belong to Department of Urology, Sapporo Medical University and Sanjukai Hospital), Japan.

**4. Participants**

Fifty patients with mild erectile dysfunction.

**5. Intervention**

Arm 1: treatment with goshajinkigan (牛車腎気丸; manufacturer, not specified) 2.5 g t.i.d. for 8 weeks (n=25; of these 24 were included for analysis).

Arm 2: treatment with limaprost 10 µg t.i.d. for 8 weeks (n=25; of these 24 were included for analysis).

**6. Main outcome measures**

Achievement of two consecutive vaginal penetrations, nocturnal penile tumescence measurements, and self-reported penile rigidity (0-5 points) and maintenance of erection (0-5 points).

**7. Main results**

Four of 24 analyzable patients in arm 1 and 11 of 24 in arm 2 achieved at least two consecutive vaginal penetrations; the rate of response was significantly higher in arm 2 than in arm 1 ( $P<0.05$ ). However, not all patients who achieved vaginal penetrations experienced full erection. The mean increase of penile circumference was  $6.0\pm 6.6$  mm for 23 patients who had measurements in arm 2 and only  $2.3\pm 5.8$  mm for 21 patients in arm 1. The increase of penile circumference was significantly greater in arm 2 than in arm 1. There were no significant between-arm differences in the penile rigidity and maintenance of erection.

**8. Conclusions**

Limaprost, an oral prostaglandin E1 derivative, is more effective than goshajinkigan in the treatment of mild erectile dysfunction.

**9. From Kampo medicine perspective**

None.

**10. Safety assessment in the article**

One limaprost-treated patient developed facial flush.

**11. Abstractor's comments**

This study demonstrated that limaprost, an oral prostaglandin E1 analogue, was more effective than goshajinkigan in the treatment of mild erectile dysfunction. All patients in this study had achieved full erection after local injection of prostaglandin E. Limaprost resulted in a response in 45.1% of patients, but not in full erection. In this study, treatment assignment was in the order of patient presentation, but a randomized assignment is preferred.

**12. Abstractor and date**

Okabe T, 19 August 2008, 1 June 2010, 31 December 2013.