ORIGINAL ARTICLE

Efficacy and Safety of Qiaoshao Formula (翘芍方, QSF) on Patients with Lifelong Premature Ejaculation of Gan (Liver) Depression and Shen (Kidney) Deficiency Syndrome: A Randomized Controlled Trial*

GUO Jun (郭军)¹, GAO Qing-he (高庆和)¹, WANG Fu (王福)¹, YU Guo-jin (余国今)¹, ZHANG Ji-wei (张继伟)¹, ZENG Yin (曾银)¹, GENG Qiang (耿强)², GUO Bo-da (郭博达)³, and HAN Qiang (韩强)⁴

ABSTRACT  Objective: To observe the efficacy and safety of Qiaoshao Formula (翘芍方, QSF) on patients with lifelong premature ejaculation (LPE) of Gan (Liver) depression and Shen (Kidney) deficiency syndrome.

Methods: A total of 60 LPE patients were randomly divided into treatment (QSF) and control (dapoxetine) groups. The treatment group received QSF twice a day and the control group received dapoxetine 1 to 2 h prior to planned sexual intercourse for 4 weeks. The outcomes included intra-vaginal ejaculation latency time (IELT), premature ejaculation diagnostic tool (PEDT), clinical global impression of change (CGIC), scores of Chinese medicine symptoms (CMSS), sex life satisfaction (SLS) and adverse events (AEs).

Results: In the treatment group, the median IELT was 3 min vs. 1.5 min before and after treatment (P<0.05). PEDT in the treatment group was reduced to 11.76±1.68 from 15.83±2.30 after treatment (P<0.05). Besides, patient's SLS was improved from 1.30±0.05 to 6.30±0.04 (P<0.05), and spouse's SLS was increased from 1.30±0.08 to 6.10±0.06 (P<0.05); CMSS was decreased from 14.86±3.02 to 9.82±2.87 (P<0.05). In addition, no significant AE was observed in both groups.

Conclusion: QSF may be effective and safe on LPE patients with Gan depression and Shen deficiency syndrome.

KEYWORDS  lifelong premature ejaculation, Qiaoshao Formula, Chinese medicine, dapoxetine, intra-vaginal ejaculation latency time, premature ejaculation diagnostic tool

Premature ejaculation (PE) is the most common male sexual dysfunction. A study showed that 25.8% of Chinese men suffered from PE, and 11.63% of them was diagnosed as lifelong PE (LPE).¹ The first contemporary multivariate evidence-based definition of LPE was developed in 2008 by a panel of international experts, convened by the International Society for Sexual Medicine (ISSM), who agreed that the diagnostic criteria necessary to define PE are time from penetration to ejaculation, inability to delay ejaculation and negative personal consequences from PE. PE could cause anxiety, depression and other mental symptoms, as well as reduction of spouse's sex life satisfaction (SLS).²

Dapoxetine is a first-line drug treatment for PE. However, its most frequently reported adverse effects (AEs) include nausea, diarrhea, headache, dizziness, insomnia, etc. Most AEs were mild to moderate in severity, and few subjects across groups reported severe or serious. Therefore, there is an urgent need to complete the treatment of PE. Chinese medicine (CM) has been used in the treatment of PE for more than 2,000 years in China. Previous study has showed that CM can bring good outcomes of intra-vaginal ejaculation latency time (IELT).³ Here, we conducted a randomized controlled trial (RCT) to explore the efficacy and safety of Qiaoshao Formula (翘芍方, QSF) on LPE patients with Gan (Liver) depression and Shen (Kidney) deficiency syndrome.

©The Chinese Journal of Integrated Traditional and Western Medicine Press and Springer-Verlag Berlin Heidelberg 2016

*Supported by the National Natural Science Foundation of China (No. 81273930)
1. Department of Andrology, Xiyuan Hospital, China Academy of Chinese Medical Sciences, Beijing (100091), China; 2. Department of Andrology, The First Teaching Hospital of Tianjin University of Traditional Chinese Medicine, Tianjin (300193), China; 3. Xiangya School of Medicine, Central South University, Changsha (410013), China; 4. Department of Andrology, Beijing Traditional Chinese Medicine Hospital Affiliated to Capital Medical University, Beijing (100010), China
Correspondence to: Dr. WANG Fu, Tel: 86-10-62835134, E-mail: fu311306@163.com
DOI: 10.1007/s11655-016-2456-7
METHODS

Diagnostic Criteria
The diagnosis of PE was according to the 2014 Guidelines of International Society of Sexual Medicine, and the diagnostic criteria of LPE were as follows: (1) ejaculation which always or nearly always occurs prior to or within about 1 min of vaginal penetration from the first sexual experience; (2) inability to delay ejaculation on all or nearly all vaginal penetrations; (3) negative personal consequences, such as distress, bother, frustration and/or the avoidance of sexual intimacy.

Syndrome differentiation of Gan depression and Shen deficiency syndrome were defined when the patients with primary symptoms and at least two of the secondary symptoms combined with the corresponding tongue picture and pulse manifestation. Primary symptoms include soreness and weakness of waist and knees, fullness in chest and rib cage; secondary symptoms consist of depression, dizziness and tinnitus, chest tightness with heave deep sigh, sex apathy, with pale purple tongue and small and wiry pulse.

Inclusion, Exclusion and Drop-out Criteria
Patients met the following inclusion criteria were included: (1) Western medicine diagnostic criteria of PE and syndrome differentiation standard of CM mentioned above; (2) age of 23–40 years old; (3) disease duration more than 1 year; (4) normal erectile function (5-item version of the International Index of Erectile Function (IIEF-5) >21; (5) a signed consent form.

The exclusion criteria were as follows: (1) patients with reproductive organ deformity and without sex experiences; (2) patients with urinary tract infections, such as urethritis, prostatitis, etc; (3) patients who are allergic to any drug used in the study; (4) patients with New York Heart Association (NYHA) heart function over level II; (5) patients with severe mental disorders, such as epilepsy or a history of mania; (6) patients with severe renal and/or hepatic insufficiency; (7) patients who participated in other clinical trials within 3 months.

Drop-out criteria included: (1) subjects with poor compliance, self withdrawal in the course of treatment; (2) in the trial process, patients received other therapies or change the therapies by themselves; (3) patients with severe AE or complications.

Patient
Sixty patients were finally recruited from Department of Andrology, Xiyuan Hospital, China Academy of Chinese Medical Sciences between February 2014 and December 2014. The baseline assessment on the eligible patients was completed 1 week before the treatment. They were randomly assigned to treatment or control groups by the ratio of 1:1 using a table of computer-generated random numbers (SPSS 13.0 software, Figure 1). This trial was approved by the Medical Ethics Committee of Xiyuan Hospital, China Academy of Chinese Medical Sciences (No. 2014XL052-2).

Assessed for eligibility (n=181)
Excluded (n=121)
-Not meeting inclusion criteria (n=32)
-Declined to participate (n=66)
-Other reasons (n=23)

Randomized (n=60)

Allocated to QSF (n=30)
Allocated to dapoxetine (n=30)

Lost to follow-up (n=1)
-Patient cannot be contacted (n=1)

Analysed (n=29)

Analysed (n=30)

Figure 1. Flow Diagram of the Study

Treatment
Patients in the treatment group received QSF granules, consisted of Fructus Forsythiae 20 g, Radix Paeoniae Alba 15 g, Radix Bupleuri 15 g, Radix Astragali seu Hedysari 10 g, Morinda officinalis How 15 g, Rhizoma Dioscoreae 15 g, and Rhizoma Acori Graminei 5 g, prepared by Department of Pharmacology, Xiyuan Hospital, twice a day for 4 weeks. Meanwhile, patients in the control group were administered dapoxetine (Menarini Co., Ltd., batch No. DWZS000.A4), one bag twice daily, added 150 mL warm boiled water, mixed up and drank immediately 1 to 2 h prior to planned sexual intercourse. The patients were required to have sex intercourse at least once a week.

Outcome Measures
The primary outcome was the change of IELT before and after treatment. IELT was recorded with a stopwatch. Patients in the control group recorded IELT when medicine was received. In the treated group, IELT before follow-up was recorded for evaluation. In case