

# Letter to the Editor regarding the Article: "Anti-Inflammatory and Antimicrobial Effects of a Novel Herbal Formulation (WSY-1075) in a Chronic Bacterial Prostatitis Rat Model" by Park et al. World J Mens Health 2016;34(3):179-185

# Yu Seob Shin, Bo Ram Choi, Jong Kwan Park

Department of Urology, Chonbuk National University Medical School, and Research Institute of Clinical Medicine of Chonbuk National University-Biomedical Research Institute and Clinical Trial Center of Medical Device of Chonbuk National University Hospital, Jeonju, Korea

The article by Park et al [1] is indeed interesting. This article is one of the rare reports about anti-inflammatory effect of herbal medicine in a chronic bacterial prostatitis. The results of their study indicate that the herbal formula WSY-1075, which was prepared from a mixture of *Corni fructus*, *Angelica gigantis radix*, *Lycii fructus*, *Cervi parvum cornu*, *Ginseng radix rubra*, and *Cassiae cortkex*, had anti-inflammatory and anti-oxidative effects in a chronic bacterial prostatitis rat model [1]. We agree that WSY-1075 may be useful for the clinical treatment of all kinds of chronic prostatic diseases with mechanisms involving oxidative effects in the near future. Because antibiotics and other drugs cannot fully enter the prostate tissues, which limits the efficacy of treatment.

In addition, many studies have shown the negative effect of chronic bacterial prostatitis on basic semen parameters by decreasing sperm total motility, the percentage of progressively motile sperm and delaying the duration of semen liquefaction [2]. When the male genitourinary tract is infected, oxidative stress and inflammatory factors may change the seminal plasma environment, which leads to the impairment of sperm motility. Sperm damage occurs

when oxidative stress overcomes natural antioxidant defenses [3]. Oxidative stress is a crucial regulator of endoplasmic reticulum function and activation of the unfolded protein response in disease conditions, increased oxidative stress production occur concurrently. Oral antioxidant supplements may improve sperm quality by reducing oxidative stress [4,5]. In our opinion, the WSY-1075 decreased these detriments, and so may be potentially valuable in chronic bacterial prostatitis relating infertility. We expect further studies to evaluate the effect of herbal mixture, such as WSY-1075 in infertility by chronic prostatic diseases in the near future.

## **Disclosure**

The authors have no potential conflicts of interest to disclose.

### **Author Contribution**

Research conception & design: Shin YS, Choi BR, Park JK. Drafting of the manuscript: Shin YS. Critical revision of the manuscript: Shin YS, Park JK. Approval of final manuscript: all authors.

Received: Sep 27, 2017; Accepted: Oct 3, 2017; Published online Nov 16, 2017

Correspondence to: Jong Kwan Park in https://orcid.org/0000-0001-9682-2081

Department of Urology, Chonbuk National University Medical School, 20 Geonji-ro, Deokjin-gu, Jeonju 54907, Korea. Tel: +82-63-250-1510, Fax: +82-63-250-1564, E-mail: rain@chonbuk.ac.kr

# **ORCID**

Yu Seob Shin, https://orcid.org/0000-0002-1126-3821 Bo Ram Choi, https://orcid.org/0000-0002-0203-7080 Jong Kwan Park, https://orcid.org/0000-0001-9682-2081

# **REFERENCES**

1. Park JW, Jeong HC, Moon HW, Cho SJ, Yang JH, Kim WH, et al. Anti-inflammatory and antimicrobial effects of a novel herbal formulation (WSY-1075) in a chronic bacterial prostatitis rat model. World J Mens Health 2016;34:179-85.

- 2. Shang Y, Liu C, Cui D, Han G, Yi S. The effect of chronic bacterial prostatitis on semen quality in adult men: a meta-analysis of case-control studies. Sci Rep 2014;4:7233.
- 3. Tremellen K. Oxidative stress and male infertility: a clinical perspective. Hum Reprod Update 2008;14:243-58.
- 4. Soni KK, Zhang LT, You JH, Lee SW, Kim CY, Cui WS, et al. The effects of MOTILIPERM on cisplatin induced testicular toxicity in Sprague-Dawley rats. Cancer Cell Int 2015;15: 121.
- 5. Cai T, Verze P, La Rocca R, Palmieri A, Tiscione D, Luciani LG, et al. The clinical efficacy of pollen extract and vitamins on chronic prostatitis/chronic pelvic pain syndrome is linked to a decrease in the pro-inflammatory cytokine interleukin-8. World J Mens Health 2017;35:120-8.