AB022. Transrectal microwave thermotherapy causing a shorttime influence on sperm quality in Chinese chronic nonbacterial prostatitis patients

Jia-Xin Jin, Zheng-Xing Zhai, Nan Xiao, Zhi-Long Dong, Zhi-Ping Wang

Institute of Urology, Department of Urology, Key Laboratory of Diseases of Urological System Gansu Province, Gansu Nephro-Urological Clinical Center, Lanzhou University Second Hospital, The Second Clinical Medical College of Lanzhou University, Lanzhou 730030, China

Abstract: Chronic prostatitis can affect the sperm's quality. Previous studies have shown that transrectal microwave thermotherapy (TRMT) results in symptomatic relief in patients with chronic prostatitis, but the effects on sperm have not been carefully investigated. This study evaluates the impact of TRMT on the relief or decrease of symptoms and quality of sperm when used to treat patients with chronic nonbacterial prostatitis. Sixty patients were enrolled in the study. TRMT treatment was administered over 5 days, 1 h per day. Semen examination was carried

out pretreatment and immediately at the conclusion of the 5-day treatment. Also, it was repeated 1, 3-, and 6-month later. The treatment's symptom relief efficacy was evaluated using the National Institutes of Health Chronic Prostatitis Symptom Index (NIH-CPSI). After the treatment, the overall NIH-CPSI scores were lower compared to those of pretreatment. In addition, the white blood cells and lecithin in expressed prostatic secretion were normal after the treatment. The sperm count was decreased by 23.8% 3 months after the treatment, sperm motility was reduced by 10.3% immediately after treatment, and sperm deformity was increased by 17.2%. The sperm volume and pH were not affected. However, the sperm quality recovered after treatment and the malformation rate was also lower at 6 months after treatment. TRMT is a favorable and safe treatment option for patients with nonbacterial chronic prostatitis. It could relieve the patient's symptoms and impact on sperm quality in the short-term.

Keywords: Chronic pelvic pain symptom; chronic prostatitis; sperm quality; transrectal microwave thermotherapy (TRMT)

doi: 10.21037/tau.2018.AB022

Cite this abstract as: Jin JX, Zhai ZX, Xiao N, Dong ZL, Wang ZP. Transrectal microwave thermotherapy causing a short-time influence on sperm quality in Chinese chronic nonbacterial prostatitis patients. Transl Androl Urol 2018;7(Suppl 5):AB022. doi: 10.21037/tau.2018.AB022