Re: Acupuncture for recurrent urinary tract infection in women: A systematic review and meta-analysis. (First comment on BJOG-20-0142.R1)

Terje Alræk¹

¹Kristiania University College

June 11, 2020

Dear Editor

I read with interest the paper by Xindong Qin et al. "Acupuncture for Recurrent Urinary Tract Infection in Women: A Systematic Review and Meta-Analysis¹ in which the possible mechanisms for acupuncture are discussed. This article refers to one of my studies,² but one of the study's main findings has been omitted. We found a correlation between fewer urinary tract infections and a reduction in volume of residual urine in the women treated with acupuncture. This change in residual urine did not occur in the control group who were not treated with acupuncture. Residual urine or post-voided volume was measured by a bladder scan, in a hospital setting, and by a nurse who was blinded to participants group allocation. What is an empty Bladder? A post-voided volume above 30 ml, in otherwise healthy women, has been regarded as one of many potential risk factors for recurrent urinary tract infection. Interestingly all women in our study had at baseline more than 30 ml of residual urine.² After 6 months control this was reduced from 35,4 ml to 18.2 ml (P [?] 0.01) in the acupuncture group while no change was observed in the control group (35.5 vs 38.8ml). Furthermore, residual urine has been recognized as one of several potential risk factors for recurrent urinary tract infections in children 4 and in healthy postmenopausal women.⁵ It is therefore important that post-voided volumes are included in future studies on acupuncture as a prophylactic treatment for recurrent urinary tract infections. Finally, a question to the authors, on page 6, you write: "None of the studies reported the secondary outcomes of urinary bacteria culture, WBCs of urine dipstick, kidney function, markers of kidney damage, health-related quality of life or healthcare costs." However, our study² used a dipstick (Uricult) and we presented the number of infections with or without bacteriuria.

Sincerely,

Terje Alræk

School of Health Sciences / NAFKAM, Department of Community Medicine, Kristiania University College / Faculty of Health Science, UiT The Arctic University of Norway 0107 Oslo, Norway / 9037 Tromsø, Norway

References

1. Qin X, Coyle ME, Yang L, Liang J, Wang K, Guo X, Zhang AL, Mao W, Lu C, Xue CC, Liu X. Acupuncture for recurrent urinary tract infection in women: a systematic review and meta-analysis. BJOG 2020; https://doi-org.pva.uib.no/10.1111/1471-0528.16315

- 2. Alraek T, Soedal LI, Fagerheim SU, Digranes A, Baerheim A. Acupuncture treatment in the prevention of uncomplicated recurrent lower urinary tract infections in adult women. Am J Public Health 2002;92:1609–11
- 3. Haylen BT. The empty Bladder. Int Urogynecol J Pelvic Floor Dysfunct. 2007 Mar;18(3):237-9. doi: 10.1007/s00192-006-0111-0
- 4. Hoebeke P, Van Laecke E, Van Camp C, Raes A, Van De Walle J. One thousand video-urodynamic studies in children with non-neurogenic bladder sphincter dysfunction. BJU International (2001), 87, 575–580
- 5. Stamm WE, Raz R. Factors contributing to susceptibility of postmenopausal women to recurrent urinary tract infections. Clin Infect Dis. 1999 Apr;28(4):723-5. doi: 10.1086/515209.