Letter to Editor

Be Conscious to be Healthy: An Initiative to Prevent Recurrent Urinary Tract Infection in Iraqi Women

Dear Editor,

Urinary tract infection (UTI) is the most continual bacterial infection in females that affect millions of persons yearly. [1-3] UTI is responsible for 25% of total infections. [2] Females are greatly more susceptible to UTI than males; [4] more than 50% of women will suffer from UTI during their life. [2] *Escherichia coli* is implicated in UTI as a major causative agent. [1-4] The social cost due to UTI is so expensive that may cost billions of dollars in developed countries. [3]

Recurrent UTI (RUTI) defined as three UTIs through 12 months with positive urine culture; this re-infection is caused by the same bacterial pathogen. [2] Many females suffer from RUTI with a high rate that stays a major challenge, this requiring long-term prophylactic therapy to prevent it. [1] In females, short distance between anus and vagina, facilitates ascending rectal normal flora to enter urethra and causing RUTI, so whipping genital area from front to back is important to prevent it. [2]

Persistent sexual intercourse is considered the biggest risk factors for RUTIs in women; further, females are encouraged to prevent spermicidal contraceptives and vaginal douching, which may irritate and hurt the vagina that facilitates the entry and colonisation of bacteria inside the urinary tract.^[2] At present, testing for UTI is easily performed using dipstick tests; the normal dipstick outcome for nitrites and leukocyte esterase excludes infection. It is important to advise early post-coital voiding, besides liberalising fluid intake through the daytime periods.^[5]

Two nutraceuticals that have been observed for preventing RUTI are probiotic *lactobacillus* and cranberry products; these products may be advantageous because of the safety and availability.^[1]

Post-menopausal women have greater rates of UTI due to pelvic prolapse, loss of oestrogen and little *lactobacilli* in the vaginal flora. Oestrogen helps a generation of *lactobacillus* in the vagina, reduces pH, as well as avoids vaginal colonisation by pathogenic bacteria. Vaginal oestrogen uses to reduce RUTIs by 36%–75%; further, it has safe systemic absorption.^[2] Asymptomatic bacteriuria is transient in the post-menopausal women; it may be resolved spontaneously and is not linked with morbidity; in addition, no antibiotic is recommended.^[5]

Uncomplicated UTI can be resolved in 94% of patients by oral drugs. Cephalosporins and penicillins are safe through pregnancy, while sulphonamides, trimethoprim and floroquinolones should be completely avoided.^[2,6]

To conclude, UTI is the most frequent bacterial infection in females that affect millions of individuals; females infected with RUTI should be encouraged to drink plenty of fluids (2–3 l per day) and to urinate frequently as possible to flush bacteria from the bladder. On the other hand, holding urine for a long period permits bacteria to grow within the urinary tract, leading to cystitis. Preventive measures associated with sexual intercourse may diminish the recurrence rate. Moreover, women are advised to clean the genital areas before and after sex, also to wipe from front to back, which will prevent the spread of *E. coli* from the perigenital area to the urethra.

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There are no conflicts of interest.

Falah Hasan Obayes AL Khikani, Huda Ali Salman Almosawey¹

Department of Microbiology, Al Shomali General Hospital, Babil,
1Department of Microbiology, Ahlulbait university, Karbala, Iraq

Address for correspondence: Dr. Falah Hasan Obayes AL Khikani, Department of Microbiology, Al Shomali General Hospital, Babil, Iraq. E-mail: falahgh38@gmail.com

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REFERENCES

- O'Brien VP, Hannan TJ, Nielsen HV, Hultgren SJ. Drug and vaccine development for the treatment and prevention of urinary tract infections. Microbiol Spectr 2016;4:33-8.
- Al-Badr A, Al-Shaikh G. Recurrent urinary tract infections management in women: A review. Sultan Qaboos Univ Med J 2013;13:359-67.
- Flores-Mireles AL, Walker JN, Caparon M, Hultgren SJ. Urinary tract infections: Epidemiology, mechanisms of infection and treatment options. Nat Rev Microbiol 2015;13:269-84.
- Al-Khikani FH, Auda GA, Ayit AS. Correlation study between urinary tract bacterial infection and some acute inflammatory responses. Biomed Biotechnol Res J 2019;3:236-9.
- 5. Mody L, Juthani-Mehta M. Urinary tract infections in older women:

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