

## ANTIBIOTIC USE IN THERAPY OF URINARY TRACT INFECTIONS

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Antibiotics are the gold standard in treating and preventing recurrent urinary tract infections (UTIs), but their widespread, irrational use leads to the development of antimicrobial resistance (1,2). The aim of this study was to analyze the use of antibiotics in patients with UTIs symptoms. An online survey for patients was disseminated by researchers and community pharmacists during the winter 2020/21. The study was approved by the Ethical Committee of the University of Belgrade – Faculty of Pharmacy. The study included 736 respondents, 31.5 years of age in average, and most of them were women (80.8%). Approximately 40% of patients reported that they experienced symptoms of UTIs in previous years, and 49.3% of patients did not seek a counsel of health care professionals, and rather had used therapy following the advice of friends, family members or by their opinion. A smaller number of patients used antibiotics in therapy (n=178, 24.2%) prescribed by the doctor (79.2% of patients), and in some cases without prior consultation with a doctor (20.8% of patients). Antibiotics successfully treated 70% of UTIs. According to data collected from 133 patients, 17 different antibiotics were used in UTI treatment. The most used antibiotics were: ciprofloxacin (23.3%), cephalexin (17.3%) and fosfomycin (14.3%). Antibiotics used for UTIs treatment didn't comply with the European Association of Urology guidelines. Considering that the use of medicines could be initiated by patients and therefore be unreported, the use of medicines for UTIs should be analysed both from clinical patients' data records and individual patients' reports.

### References

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2. Wagenlehner FM, Johansen TEB, Cai T, Koves B, Kranz J, Pilatz A, Tandogdu Z. Epidemiology, definition and treatment of complicated urinary tract infections. Nature Reviews Urology. 2020;17(10):586-600.

## UPOTREBA ANTIBIOTIKA U TERAPIJI INFEKCIJA URINARNOG TRAKTA

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Antibiotici predstavljaju zlatni standard u lečenju i prevenciji rekurentnih infekcija urinarnog trakta (IUT), ali njihova učestala, neracionalna upotreba dovodi do razvoja antimikrobne rezistencije (1,2). Cilj ovog istraživanja bio je da se analizira upotreba antibiotika kod pacijenata sa simptomima IUT. Istraživači i farmaceuti u javnim apotekama su distribuirali pacijentima onlajn anketu tokom zime 2020/21. Studiju je odobrila Etička komisija Farmaceutskog fakulteta – Univerziteta u Beogradu. Istraživanjem je obuhvaćeno 736 ispitanika, prosečne starosti 31,5 godina, među kojima su najviše bile žene (80,8%). Približno 40% pacijenata je izjavilo da su imali simptome IUT tokom prethodne godine, od kojih 49,3% pacijenata nije tražilo savet zdravstvenih profesionalaca, već je koristilo terapiju po savetu prijatelja, članova porodice ili po njihovom sopstvenom mišljenju. Manji broj pacijenata koristio je antibiotike u terapiji (n=178, 24,2%) na osnovu lekarskog recepta (79,2% pacijenata), a u pojedinim slučajevima i bez prethodne konsultacije sa lekarom (20,8% pacijenata). Antibiotici su uspešno lečili 70% IUT. Prema podacima prikupljenim od 133 pacijenta, u lečenju IUT korišćeno je 17 različitih antibiotika. Najviše korišćeni antibiotici su: ciprofloksacin (23,3%), cefaleksin (17,3%) i fosfomicin (14,3%). Antibiotici koji su korišćeni za lečenje IUT nisu bili u skladu sa smernicama Evropskog udruženja za urologiju. Budući da pacijenti u nekim slučajevima sami započinju terapiju bez prethodne konsultacije sa lekarima, upotrebu lekova za IUT treba analizirati kako na osnovu kliničkih podataka pacijenata, tako i iz izveštaja pojedinačnih pacijenata.

### Literatura

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