

URINARY TRACT INFECTIONS TREATMENT IN KIDNEY TRANSPLANT RECIPIENTS

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Introduction. Kidney transplantation remains the treatment of choice for patients with end-stage renal disease. Urinary tract infection in kidney transplant recipients is the most frequent and considered a potential cause of bacteremia, sepsis, and graft rejection. The purpose of this study was to determine its causative agents, and antimicrobial resistance pattern among renal transplant recipients in a transplant center, to appreciate the rational selection of antibacterial treatment.

Materials and Methods: Using the information system (SIA AMS), patients undergoing renal transplant surgery in the Hemodialysis and Renal Transplant Center of the *Timofei Mosneaga* Republican Clinical Hospital during 2017-2024 were identified. Data on hospitalization due to urinary tract infection were selected with subsequent evaluation from the observation records of bacteriologic investigations and antibacterial treatment.

Results: According to the data obtained, 32 patients underwent renal transplantation and 13 were readmitted with urinary tract infection. The pathogens identified in the urine were gram-negative and antibacterial treatment was selected according to sensitivity: *E. Coli* (8)-amoxicillin/clavulanic acid (1), piperacillin/tazobactam (2), ceftazidim (1), cefoperazone/sulbactam (1), meropenem (3); *E. Faecalis* (1)-amoxicillin/clavulanic acid (1), *K. Pneumoniae* (4)-cefotaxime (1), sulfamethoxazole/trimethoprim (1), imipenem/cilastatin (2). The dosing regimen was adjusted according to renal function and the duration of administration ranged from 7 to 14 days.

Conclusions: The high resistance of Enterobacteriaceae bacteria has led to the use of antibiotics from the WHO watch group-carbapenems (imipenem, meropenem), generation III cephalosporins (cefotaxime, ceftazidim), antipseudomonas penicillins with beta-lactamase inhibitors (piperacillin/tazobactam). Drug selection and dosing regimen requires assessment of bacterial sensitivity, renal function, associated pathologies of the patient to provide clinical and bacteriologic improvement, considering the role of urinary tract infections in graft failure and rejection.

Key words: urinary tract infection, kidney transplant, antibacterial medication, bacterial resistance.