

as compared to less invasive options (ESWL and uretheroscopy). The tubeless PCNL offers patients the benefits of no urine leakage, no discomfort from an external drainage tube.

**Aim of the study.** Analysis of the results obtained in the clinic following PCNL intervention applied to patients with urolithiasis, during one year.

**Materials and methods..** The study was performed in the Department of Urology and Surgical nephrology of the State University of Medicine and Pharmacy "Nicolae Testemitanu", within the Republican Clinical Hospital "Timofei Moşneaga", on a batch of 43 patients with the diagnosis of Urolithiasis, treated by the (PCNL), during the year 2019. Patients were subjected to a cross-sectional study (extraction of data from the hospital patient's medical record).

**Results.** The gender distribution of patients was as follows: 29 (67,5%) women and 14 (32,5%) men diagnosed with urolithiasis. The average age of the patients was : 55 years Anatomical distribution of renal stones: right kidney 21 (48,9%) patients, left kidney 22 (51,1%) patients. The stone's dimensions ranged from 2 cm up to massive staghorn stones( > 4,5cm). The postoperative hospitalization period on average was 5 days. The localization and size of calculi were as follow: Renal pelvis 18 (41,8%) patients, caliceal stones 16 (37,2%) patients, staghorn stones 9 (21%) patients. Stones dimensions: 2-2,5 cm-18 (41,86%) patients; 2,6- 4 cm -16 (37,2%) patients; >4,5cm – 9 (20,93%) patients. The stratification of the surgical postoperative complications was done according to the Clavien-Dindo score. CDS I, 31 (72,1 %); patients CDS II, 5 (11.6 %) patients, CDS III, 3 (7 %) patients. Patients with CDS IV and V, were not detected. From the group of patients, 3 (7%) of them were tubeless and 1 (2,3%) patient with two puncture channels.

**Conclusions.** The success of PCNL is dependent on many factors such as stone composition, stone size, number of stones, location within the urinary tract, patient body habitus (obesity), and anatomy of the collecting system of the kidney. Surgeons carefully consider all of the aforementioned variables in order to maximize success of PCNL . Overall stone free success rate is approximately 90% following an initial PCNL and 90-100% following a “second look” procedure.

**Key words:** PCNL, urolithiasis, Clavien-Dindo score, staghorn.

## 84. COMPARATIVE EPIDEMIOLOGY AND RESISTANCE TRENDS OF COMMON URINARY PATHOGENS

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**Introduction.** Urinary tract infections (UTIs) are some of the most common infections in human medicine, affecting a large patient population (around 150 million cases/year) to various extents, irrespective of age and gender. The principal cause of UTIs (>80%) are uropathogenic *Escherichia coli* and *Klebsiella* species both in the community and nosocomial settings. The assessment of local data on the prevalence and resistance is essential to evaluate trends over time and to make adjustments on the empirical treatment protocol.

**Aim of the study.** Assessment of epidemiology and resistance trends of most common urinary pathogens in order to create a hospital-specific antibiogram and practical recommendation on first chose antibiotics for empirical and prevention treatment.

**Materials and methods..** A retrospective record review of data collected from laboratory results of 1299 patients admitted to the Urology Department of Republican Clinical Hospital between April 2019 and October 2019 was done. The outcome of interest was the antibiotic susceptibility of bacterial isolates from the patient's urine probes, before or after planned surgery. Pathogens the selection was done according to the highest incidence observed: Escherichia Coli, Klebsiella pneumonia, Proteus Mirabilis and Pseudomonas aeruginosa. The isolates were analyzed for susceptibility and resistance to 4 antimicrobial groups (Cephalosporins, Carbapenems, Fluoroquinolones, Aminoglycosides) and 3 miscellaneous agents (Nitrofurantoin, Fosfomycin trometamol, Trimethoprim-sulfamethoxazole).

**Results.** A total of 221 (17%) isolates from urines, of 4 selected bacteria were analyzed: Escherichia Coli (43.43%), Klebsiella pneumonia (33.48%), Proteus Mirabilis (12.66%) and Pseudomonas aeruginosa (5.88%). According to received data, the highest susceptibility for Escherichia Coli, Klebsiella pneumonia and Proteus Mirabilis it was for Fosfomycin with 92.7%, 63.51% and 89.28 respectively. Pseudomonas aeruginosa sensitivity it was highest for Amikacin followed by Carbapenems and Cefalosporins with 76.92%, 61.53% and 53.84% respectively. Klebsiella pneumonia was found with the lowest susceptibility to Cephalosporins (29.72%), Fluoroquinolones (27.02%) and Nitrofurantoin (18.91%) – those antibiotics that are most commonly used as prophylaxis and empirical treatment. If we consider the general impact of Amikacin on selected bacteria, we see that almost 75% of all isolates are sensitive to it.

**Conclusions.** Statistically significant increases in resistance to commonly used antibiotics were observed. In this respect, we consider that the choice of empiric antibiotic therapy should be selected based on local susceptibility profiles. The choice of antimicrobial drugs should be reconsidered when it comes to prevention or empiric treatment, as most commonly used groups of antibiotics are no more effective. From this specific study, we can conclude that Amikacin and Fosfomycin trometamol should be considered as first chose antibiotics for empirical and prevention treatment.

**Key words:** Urinary tract infection, antibiotics, resistance, epidemiology, fosfomycin, amikacin, Escherichia coli, Klebsiella pneumonia, Proteus Mirabilis, Pseudomonas aeruginosa.

## **85. PARTICULARITIES OF THE EVOLUTION OF ACUTE OBSTRUCTIVE PYELONEPHRITIS IN PREGNANCY**

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**Introduction.** From the common complications of pregnancy, most often infections of the urinary tract (UTI) are met, these due to physiological and anatomical changes during pregnancy, which mostly leads to the development of urinary tract infection. Another important factor is the pregnant uterus that mechanically compresses the ureters and leads to urinary stasis.

**Aim of the study.** Evaluation of the particularities of the evolution of acute obstructive pyelonephritis in pregnancy, the influence of infections on gestational duration, on childbirth and the particularities of the diagnostic plan.

**Materials and methods..** The study selected information from the medical record and perinatal notebook of each pregnant woman who is urgently hospitalized in the Urology Department of