

between those two agents selection and both clinical and economic outcomes in the treatment of uncomplicated UTIs.

Material and Methods: The study has started in January 2008 and will go on. The studied population is a total of 72 ambulatory patients with uncomplicated UTIs, from whom 12 patients had underwent in the past prostatectomy and 6 patients had UTIs following bladder catheterization. The population is randomly separated in two equal groups that were treated for three days of oral Ciprofloxacin (250 mg BID) or three days of TMP/SMX. All patients were initially evaluated (disease history, physical examination and dipstick urinalysis), treated with one of the mentioned alternative and followed-up (dipstick urinalysis after 10–14 days). The patients with recurrence of UTI within 2 weeks were requested to repeat urinary culture with antimicrobial testing and to reevaluated urinary tract. It was estimated the total treatment cost from initial evaluation to “prescription pad” to cure” including costs related to Lab testing, office visits, additional intervention (mainly in TMP/SMX-treated patients) to achieve the cure, treatments of relapses ect.

Results: Bacteriologic cure rates after four weeks were 90% for the group treated with ciprofloxacin and 75% for the group treated with TMP/SMX. Clinical cure rates after 10–14days were 95% for the group treated with ciprofloxacin and 85% for the group treated with TMP/SMX. Because of short period of treatment there were no consideration regarding side effects of both treatments. The mean total cost per patient was 30% higher for TMP/SMX-treated patients than for ciprofloxacin-treated patients.

Conclusions: Until now the study confirms that resistance phenomena is important in deciding the treatment of UTI. Ciprofloxacin is more effective and less expensive than TMP/SMX in the treatment of uncomplicated UTI.

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Two surveys of prevalence of nosocomial urinary tract infection in urology

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Introduction and Objectives: Urinary tract infections are the most common type of nosocomial (healthcare facility-acquired) infections, accounting for 40% of all infections in hospitals per year. Such infections add significantly to the economic burden expected from the underlying diseases alone. The aim was:

- to register the prevalence, the etiology and the antimicrobial susceptibility of nosocomial urinary tract infection (NUTI) pathogens isolated in urology of UHCT;
- to estimate the recommended standards to urinary catheter use;
- to improve the expertise of NUTI control.

Material and Methods: The data regarding the prevalence, etiology and antimicrobial resistance of the urinary isolates were collected on two days (26.11.07 and 01.04.09). The second survey was conducted after a two-weeks period of surgical and work pause for the disinfection of hospital clinic's premises. The Vitek 2 automated system was used to identify and to detect antibiotic susceptibility.

Results: The results of two surveys on 26.11.07 and 01.04.09 in Clinic of Urology give prevalence rates 85.71% and 13.04% respectively. There is no distinction between infection and colonization. The isolated micro-organisms on 26.11.07 were, in decreasing order: *Escherichia coli* (36.66%), *Pseudomonas aeruginosa* (20%), *Candida* (16.66%), *Enterobacter cloacae* (13.33%), *Morganella morganii* (10%), *Acinetobacter baumannii* (6.66%), *Proteus mirabilis* (3.33%), *Klebsiella oxytoca* (3.33%), *Citrobacter freundii* (3.33%), *Enterococcus faecalis* (3.33%).

The isolated micro-organisms in 01.04.09 were: *Escherichia coli* (33.33%), *Pseudomonas aeruginosa* (33.33%) and *Proteus mirabilis* (33.33%). One strain of *Pseudomonas aeruginosa* was isolated from cystoscope. Resistance to ampicillin, one of the most commonly used agents for the empirical treatment of UTIs, was as high as 90% in the case of *E. coli*. *Pseudomonas aeruginosa* isolates showed resistance rates of over 70% for quinolone and aminoglycoside antibiotics (except for amikacin), thereby posing a major problem in the management of NUTI in hospital. One of the causes of this problem could be deficient antimicrobial policies.

Conclusions: These data show the high level of antimicrobial resistance amongst the uropathogens causing nosocomial urinary tract infection. The prevalence of yeast is increasing. NUTI is related to the use of indwelling urinary catheters and other intravesical procedures. Discontinuation of catheter usage within 2 days, whenever possible, is the cornerstone to avoiding these infections. NUTI causes huge extra costs for hospitals. The levels and patterns of resistance of pathogens must be a serious cause for concern and a clear reason for stricter guidelines and regulations in antimicrobial policy. The disinfection of clinic's environment significantly contributes at avoiding the NUTIs.

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Management of the emphysematous pyelonephritis in adult patients

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Introduction and Objectives: We reviewed the clinical presentation, diagnosis and aspects of surgical or non-surgical management of patients presenting with emphysematous pyelonephritis.

Material and Methods: The clinical datas of 24 emphysematous pyelonephritis patients diagnosed between June 2000–April 2009 in our clinics were prospective reviewed. Also, the patients were divided into 3 groups according to their clinical status and severity of renal affect at computed tomography and managed with different treatment modalities in each.

Results: The mean age of the patients was 61.8 years (range, 40–81). Diabetes mellitus was detected in 21 (87.5%) of 24 patients. Generally, flank or abdominal (%91.6), nausea-vomitting (%83.3) and high fever were the main symptoms of the patients when they first referred to the hospital. Ketoacidosis was detected in 5 (%20.8) of the patients in application time. Urinary calculi was detected in 9 of the patients while partial or total urinary obstruction in 10 of them. *Escherichia coli* was the predominantly pathogen identified in pus, blood, and urine culture. Six (%25) patients in mildly effected group 1 were treated only by antibiotics, while 13 (54.2%) patients in moderately effected group 2 were treated with antibiotics and percutaneous drainage. Five (20.8%) patients in severely effected group 3 were treated with nephrectomy. Two of these patients died after nephrectomy, while the other patients were succesfully treated.

Conclusions: Emphysematous pyelonephritis might be kept in mind in the differatial diagnosis of the patients suffering from abdominal pain, nausea-vomiting with associated urological anomalies and diabetes mellitus with unregulated blood glucose. The patients with emphysematous pyelonephritis should be managed according to the severity of renal affect.