P020-e

**Typology of urinary disorders in neurofibromatosis type I**

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**Introduction.** Most of patients admitted to rehabilitation centres, have asymptomatic bacteriuria in high prevalence and are colonized with resistant microorganisms. This study’s purpose is to determine the causative agents of bacteriuria and the antibiotic susceptibility in hospitalized patients during 2012.

**Material and methods.** The urine cultures and urinalyses were performed for colonization screening at admission in the first PMR Department and periodically during hospitalization for several reasons.

**Results.** In cases of asymptomatic bacteriuria those were isolated more frequently: *E. coli* 32.1%, *K. pneumoniae* 19.1%, *P. aeruginosa* 16.9%, *Proteus mirabilis* 11.6%, *Acinetobacter baumannii* 5.1%. 62% of *P. aeruginosa* strains were multidrug-resistant (MDR). There was 24.7% of *K. pneumoniae* strains that revealed KPC phenotype. In UTIs, there were isolated *E. coli* 41%, *K. pneumoniae* 31.8%, *P. aeruginosa* 13.6%, *P. mirabilis* 9%, *A. baumannii* 4.5% etc.

**Discussion.** *P. aeruginosa*’s isolation was more frequent in asymptomatic bacteriuria than in UTIs, while in UTIs *E. coli, K. pneumoniae* were isolated more frequently. It is also significantly common for the same patients to change their isolated bacteria during their hospitalization. Pyuria and bacteriuria are common in rehabilitation patients. Using only pyuria or/and bacteriuria to determine the need for antibiotics could result in unnecessary expense, morbidity and development of resistant organisms.

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P022-e

**Incidence of Clostridium Difficile infection in a rehabilitation center**

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**Introduction.** Purpose is to report the CDI (C. difficile infection) incidence (the most common identified cause of antibiotic associated diarrhea in LTCF) in a Rehabilitation Centre in Athens, Greece.

**Material and methods.** During 12 months, direct tests were used to assess production of toxins A and B with immunochromatoc assay in stool specimens. Examination was performed for fecal leukocytes. Demographics, admission dates and clinical symptoms were analyzed.

**Results.** There were 12/25 fecal samples that were positive to C. difficile toxin (48%). Sensitivity of fecal leukocytes test (FLT) as compared to C. difficile toxins detection was 41.7%. Patients had history of antibiotic administration and hospitalization at 100%. The patients were treated with metronidazole for 10 days. Following the first course of therapy, 2/12 (16.7%) of patients had recurrence. The management of CDI patients included the implementation of disease-specific isolation precautions.

**Conclusion.** CDI incidence was high. FLT is not a reliable test for CDI. Although the presence of leukocytes in stools is a simple test to differentiate invasive versus non-invasive diarrhea, it is not a predictor for CDI. History of antibiotic usage and hospital admission were very significant for CDI. There was no evidence of cross-infection indicating that implementation of guidelines for infection prevention and control was effective.

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P021-e

**Causative agents of bacteriuria in hospitalized patients in a rehabilitation department**


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**Introduction.** Most of patients admitted to rehabilitation centres, have asymptomatic bacteriuria in high prevalence and are colonized with resistant microorganisms. This study’s purpose is to determine the causative agents of bacteriuria and compare antimicrobial susceptibilities of the strains in urinary isolates in a rehabilitation department during one year.

**Material and methods.** During 12 months, direct tests were used to assess production of toxins A and B with immunochromatoc assay in stool specimens. Examination was performed for fecal leukocytes. Demographics, admission dates and clinical symptoms were analyzed.

**Results.** There were 12/25 fecal samples that were positive to C. difficile toxin (48%). Sensitivity of fecal leukocytes test (FLT) as compared to C. difficile toxins detection was 41.7%. Patients had history of antibiotic administration and hospitalization at 100%. The patients were treated with metronidazole for 10 days. Following the first course of therapy, 2/12 (16.7%) of patients had recurrence. The management of CDI patients included the implementation of disease-specific isolation precautions.

**Conclusion.** CDI incidence was high. FLT is not a reliable test for CDI. Although the presence of leukocytes in stools is a simple test to differentiate invasive versus non-invasive diarrhea, it is not a predictor for CDI. History of antibiotic usage and hospital admission were very significant for CDI. There was no evidence of cross-infection indicating that implementation of guidelines for infection prevention and control was effective.

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P023-e

**Prevalence and antimicrobial susceptibility of ESBL producing E. coli, K. pneumoniae and P. mirabilis isolates from urine cultures in a rehabilitation department**

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**Introduction.** Extended spectrum β-lactamase (ESBL)-mediated resistance is a global concern causing treatment difficulty. The aim of this study is to evaluate prevalence of ESBL-producing *E. coli, K. pneumoniae, P. mirabilis* and compare antimicrobial susceptibilities of the strains in urinary isolates in a rehabilitation department during one year.

**Material and methods.** Recovered strains of *E. coli, K. pneumoniae, and P. mirabilis* from urine cultures were evaluated. Identification and susceptibility testing were performed with conventional methods and according to CLSI guidelines.

**Results.** The prevalence of ESBL was 27.1% in *E. coli, 21.3% in K. pneumoniae-carbapenemase(-) and 16.7% in P. mirabilis*. Resistance rate of *E. coli* ESBL(+) was for fluoroquinolones 94.7%, nitrofurantoin 15.8%, gentamicin 63.2%, while for *E. coli* ESBL(-) strains was 30.6%, 7.1% and 13.4% respectively. The resistance rate of ESBL(+)*K. pneumoniae* isolates to ciprofloxacin was 70.6%, 82.4% to sulfamethoxazole/trimethoprim, 35.3% to gentamicin. In ESBL(-)*K. pneumoniae* isolates, the resistance rate was for sulfamethoxazole/trimethoprim 31.3%, gentamicin 8.3% and ciprofloxacin 25%. Resistance rate of *P. mirabilis* ESBL(+) strains was for fluoroquinolones 100%, sulfamethoxazole/trimethoprim 100%, gentamicin 57%.

**Conclusion.** Resistance to multiple classes of antibiotics was observed among ESBL producers with higher prevalence of resistance to fluoroquinolones, sulfamethoxazole/trimethoprim and aminoglycosides. Empiric use of sulfamethoxazole/trimethoprim, fluoroquinolones and gentamicin should be avoided for these isolates.

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