

1. ABSTRACT

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Title of rigorous Thesis: Analysis of consumption of antibiotics in patients treated with dialysis

Introduction and objective: This study observes consumption of antibiotics in patients treated with dialysis in The University Hospital of Hradec Králové in years 2006 and 2007. Pilot project investigate, which kind of antibiotics used dialyzed patients (DP) the most of all. Studies further compare information from two sets of DP from Czech Republic (Group I) and Lithuania (Group II) in specific aspects of antibiotic's consumption.

Methodology: Retrospective analysis resulting from data evaluation from Nephris database of University Hospital of Hradec Králové by DP (2006&2007). Set of data of the Group II from Clinics of Kaunas Medical University – Lithuania was process by retrospective analysis too.

GLMZ mode was used for statistical analysis.

Results: Group I: from average number of 125 hospitalized patients were treated by antibiotics 71 (57%) patients. Both men and women have the same representation in the group, patients undergoing dialysis mostly in higher age, what has been discovered by mean age 66 years. From 71 patients treated with antibiotic was prescribed the most of all amoxicillin/clavulanic acid – 26% of cases. For each one patient belong 1.3 cases of antibiotic's treatment. Duration of antibiotic's exposition takes the most of all intervals from 6 to 10 days.

Group II: from average number of 113 hospitalized patients were treated by antibiotics 72 (64%) patients. Mean age was 59 years. Patients had been treated also the most of all by amoxicilin (23% cases) and duration of antibiotic's exposition takes 6 to 10 days like in the Group I.

Conclusions: Study discovers increasing antibiotic's consumption by dialyzed patients. The most prescribed antibiotic is amoxicillin. Two sets of dialyzed patients from Czech Republic and Lithuania correspond well in some aspects of antibiotic treatment.

Keywords: Rational drug use, dialysis, end-stage renal disease.

