

UNIVERZITA KARLOVA V PRAZE  
FARMACEUTICKÁ FAKULTA V HRADCI KRÁLOVÉ

**KATEDRA SOCIÁLNÍ A KLINICKÉ FARMACIE**

Abstract of diploma thesis

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**The analysis of exposition of antibacterial drugs in patients after stem cell transplantation**

The thesis focused on gaining the resistance level data connected with six most common microbial organisms isolated in Czech republic even through whole Europe. The uniqueness of the study flows from the characteristics of analysed patients' group with sorted serious blood malignities requiring bone marrow transplantation. Moreover the thesis' aim is to judge, whether the correctness, accuracy, frequency of the administration and the sufficiency of the used daily dosages of the antimicrobial drugs in the clinic was in order. The script also addresses to the field of combined antimicrobial treatment. It also scans, which drugs are administered in the hospital department and under what circumstances and those empirical data compares with the guidelines. This diploma work observes as well the popularity of administered medicaments and examines their usage during two investigated years. The present day state referring to multi or poly resistant germs including the mechanisms of the selection of these perilous clones is analysed in the theoretical part. That thesis presents, with respect to reasons among others counting irrational pharmacotherapy, insufficient hygienical arrangements in the hospitals or adding the antibiotics into the foodstuff, possible brand new ways to fight inert bacteria. Among others demanding and expensive research of still yet unknown substance or utilization of biological weapon, meaning bacteriophages, should be mentioned. Last but not least basic data concerning patients' group with focus on administration of corticosteroids and progressing cytotoxic treatment were discussed.

key words - resistance to antimicrobial drugs, transplantation of bone marrow antibiotic therapy, cytotoxic treatment