Imipenem and meropenem Drug Utilization Evaluation (DUE) in the social security hospital in Khorramabed

Amin Noori1, Razie sohrabnejad2, Hossein heibar3 and sahar changizi3
Social Security Hospital, Iran

Background: Drug utilization assessment is the marketing, distribution, prescription and use of drugs in society with special importance on the resulting medical, social and economic costs (WHO). The purpose of DUR is to ensure drugs are used appropriately, safely and effectively to improve patient health. Carbapenems possess the broadest spectrum of activity and the greatest potency against Gram-positive and Gram-negative bacteria. Several recent studies clearly show that resistance to carbapenems is increasing throughout the world.

Methods: A descriptive cross-sectional study was performed during three periods: the summer and fall of 2016, spring and summer 2017, and fall and winter 2017. Imipenem and meropenem DUE were done in a hospital in Iran. All of the patients receiving imipenem and meropenem were enrolled in this study. AHFS drug protocols have been used to perform this study.

Results: The results of this study showed that the monitoring and evaluation of the drugs, imipenem and meropenem, reduced the expenditure, consumption and duration of drug intake during the three periods. The correct use of the drug was improved. During the 3rd period, the correct indication rose to 79% for imipenem and 76% for meropenem, but the correct dosages were only imipenem 24% and meropenem 32%. During the periods studied, empirical prescription decreased to imipenem, 58% and meropenem 64%.

Conclusion: Imipenem and meropenem are mostly administered empirically, rather than using an antibiogram. Although a lower empirical therapy would be desirable, the study improved the correct indication to 79%, and a reduction of the consumption period to 7.3.

Biography

Amin Noori completed his Graduation in Doctor of Pharmacy (Pharm D) in 2014. During his study in University he has worked in different research fields including Laboratory research, e-learning. He is still doing research on Clinical Trials, Bioinformatics, Chemoinformatic and DUE. He is working in Social Security Hospital as Hospital Pharmacist in (Iranian Social Security Organization) since May 2016.

aminnoori_67@yahoo.com

Notes: