

European Respiratory Society Annual Congress 2013

Abstract Number: 5354

Publication Number: P2748

Abstract Group: 10.1. Respiratory Infections

Keyword 1: Bacteria **Keyword 2:** Comorbidities **Keyword 3:** Critically ill patients

Title: Evaluation of nephrotoxicity due to the use of colistimethate sodium in a intensive care unit

Dr. Muhammed Emin 32201 Akkoyunlu eminakkoyunlu@gmail.com MD ¹, Dr. Bahadir 32202 Ceylan drceylan@gmail.com MD ², Dr. Yasemin 32203 Akkoyunlu yaseminakkoyunlu@gmail.com MD ², Dr. Didem 32204 Özkan didemozkandr@hotmail.com MD ¹, Dr. Hatice 32205 Özçelik hkutbay54@hotmail.com MD ¹, Prof. Turan 32210 Aslan turanas@yahoo.com MD ² and Prof. Levent 32217 Kart levent.kart@gmail.com MD ¹. ¹ Department of Pulmonary Medicine, Bezmialem Vakif University, Istanbul, Turkey and ² Department of Infection Disease, Bezmialem Vakif University, Istanbul, Turkey .

Body: Background Colistimethate sodium is an old antibiotic used for infections caused by multi drug resistant (MDR) Gram (-) bacillus such as Acinetobacter baumannii, Pseudomonas aeruginosa, Klebsiella pneumoniae. Nephrotoxicity is one of the most important side effects developing during the treatment which also limits its use. We investigate the occurrence of acute renal failure due to colistimethate sodium. Material and Method We evaluated the data of 163 patient referred to the Respiratory ICU of Bezmialem Vakif University and stayed more than 24 hours between september 2012 and Jnuary 2013 retrospectively. 20 of them included in the study who recieved IV Colistimethate sodium because of infections caused by MDR Gram (-) bacillus. Results 13 of 20 patients are male. Mean age of the patients is 65.75 (42-87). Mean duration of Colistimethate sodium is 10.45 (5-19). 15 of these 20 patients also used inhaler colistimethate sodium. Six of them also recieved contrast material during radiological imaging which can also has nephrotoxicity. During the use of colistimethate sodium acute renal failure developed in 12 of the patients. Hemodialysis was applied 7 patients. 15 of the patients died whereas other 5 of them were discharged. Nine of the patients died who develop acute renal failure whereas 3 of them were discharged. Conclusion Acute renal failure occurrence rate due to the nephrotoxicity of colistimethate sodium is high. The favor and harms of this drug must be evaluated in further studies.