eP421
ePoster Viewing
New and not so new antibiotics

HYPOFIBRINOGENEMIA ASSOCIATED WITH THE ADMINISTRATION OF TIGECYCLINE

I. Karaiskos[1], E. Barmpouti[1], K. Ioannidis[2], L. Galani[1], F. Baziaka[1], C. Paskalis[3], H. Giamarellou[1]

[1]6th Dept. Internal Medicine, Hygeia General Hospital, Athens, Greece ; [2]Clinical Pharmacist, Hygeia General Hospital, Athens, Greece ; [3]Intensive Care Unit, Hygeia General Hospital, Athens, Greece

Objective: Tigecycline, a semisynthetic glycylcycline has been utilized off label for the treatment of multidrug resistant infections caused by carbapenemase producing *A.baumannii* and *K.pneumoniae* in critically ill patients due to lack of active antimicrobial agents against these pathogens. To our knowledge, the first observed cases of hypofibrinogenemia as adverse event associated with the use of tigecycline are reported.

Methods: Patients receiving tigecycline at a tertiary hospital from 2012 until 2013 empirically based on colonization or for documented MDR infections were recorded and the incidence of decreased fibrinogen levels as adverse reaction not attributed to active sepsis process, concomitant medication or coagulation disorders was reported.

Results: A total of 205 patients received tigecycline during the two year period. Twenty three (23) patients (15 male) were found with hypofibrinogenemia. The mean age was 74 years (range 37 - 89), while the median APACHE score was 19 (range 8 – 31). All patients received 50mg q12h tigecycline with a loading dose of 100mg. The median baseline fibrinogen levels at initiation of tigecycline treatment were 2.78 g/L (normal range: 1.2 – 4.5 g/L), while the median lowest levels were 1.0 g/L (range: 0.4 – 1.1 g/L), resulting in discontinuation of tigecycline. Decrease of fibrinogen levels were observed after a median period of eight (8) days treatment (range 4 – 20). Normalization of fibrinogen levels after discontinuation of tigecycline therapy was observed at a median period of 3 days (range 1 – 6), while two patients died with low fibrinogen levels. Human fibrinogen Concentrate was administrated after cessation of tigecycline treatment in seven (7) patients because of bleeding disorders. The incidence of hypofibrinogenemia was found to be 10 %.

Conclusion: Hypofibrinogemenia is a serious adverse effect of tigecycline and usually observed after 8 days of treatment with an incidence of 10 %. Close monitoring of fibrinogen levels is advised during tigecycline treatment in the critically ill patients and discontinuation of tigecycline is obligatory when fibrinogen level decline below 1.2 g/L.