PKP-004  ASSESSMENT OF COMPLIANCE OF PHARMACOKINETIC MONITORING REQUEST CRITERIA IN VANCOMYCIN AND AMINOGLYCOSIDE PRESCRIPTIONS

P. Nieto Guindo¹, F.D. FERNANDEZ-GINES¹, H. MATEO CARRASCO², I. ALFEREZ GARCIA¹.
¹Hospital Torrecárdenas, Pharmacy, Almeria, Spain.
²Northampton General Hospital, Pharmacy, Northampton, United Kingdom.

BACKGROUND
Therapeutic drug monitoring is an important mean for optimizing drug utilization and doses for the purpose of improving the clinical effectiveness.

PURPOSE
Assessing the compliance of vancomycin and aminoglycosides pharmacokinetic monitoring requests to the Trust standardised request criteria.

METHODS
Prospective observational study (March 1, 2015 at 1 April 2015).
Serum level monitoring was appropriate if the patients fulfilled at least one of the following criteria:
1. Age over 65.
2. Critical patient.
3. Prolonged antibiotic treatment (over 7 days).
4. Renal function (eGFR<30mL/min).
5. Concomitant administration of nephrotoxic agents.
6. Other data collected included: gender and admission unit.

RESULTS
169 patients were included. Vancomycin was prescribed in 67 of them, whereas 98 were on aminoglycosides (40 on Tobramycin, 27 on Amikacin, 31 on Gentamicin); and 4 patients on both.
Amongst the 115 patients (68.04%) who fulfilled the criteria for kinetic monitoring, the reasons for this were: age over 65 in 52.17% of them, and antibiotic treatment over 7 days (35.65%).
However, only in 46.95% of the cases, the request was submitted to Pharmacy.
According to the requesting unit/department, 31.4% belonged to intensive care, followed by internal medicine (29.6), neurosurgery (9.25%), and paediatrics (9.25%).

CONCLUSIONS
Around two thirds of patients in our trust receiving vancomycin and aminoglycoside therapy would benefit from kinetic monitoring. Nonetheless, antibiotic drug level monitoring and dose-adjustment were barely requested in half of those cases.
Pharmacy-lead activities, such as educational sessions aimed at raising awareness on the importance of drug level monitoring, may play a role in improving the use of this service.