PHC-010

DRUG INTERACTION: A CASE REPORT

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OBJETIVE.

The serum concentration of valproic acid (VPA) in epilepsy patients decreased to sub-therapeutic by the administration of carbapenems antibiotics. Description of the interaction and communication to Pharmacovigilance Center.

METHODS.

A case study of a 66-years-old woman admitted of resuscitation unit after being operated of perforation peritonitis.

Once reviewed her pharmacotherapeutic treatment, risk of interaction was detected among Imipenem and VPA.

VPA blood levels were monitored to confirm our suspect.

RESULTS.

Initially levels were within the therapeutic interval (TI), detecting at 24 hours of starting treatment with imipenem a decrease of 70% below TI. In addition, because of proconvulsivant properties of imipenem, it led to convulsions of the patient.

After reporting the suspected interaction, doctor decides to change the antibiotic by meropenem 1g/8h and so eliminate at least the pharmacodynamic component of the interaction.

After 24 hours of the change VPA levels continued to fall and at 48 hours were almost undetectable (≤ 3 mcg/mL). VPA dose was increased, 1100 mg/8h, without getting reverse the situation. After 30 days meropenem was suspended and VPA levels do not return to the TI until after approximately 120 h.

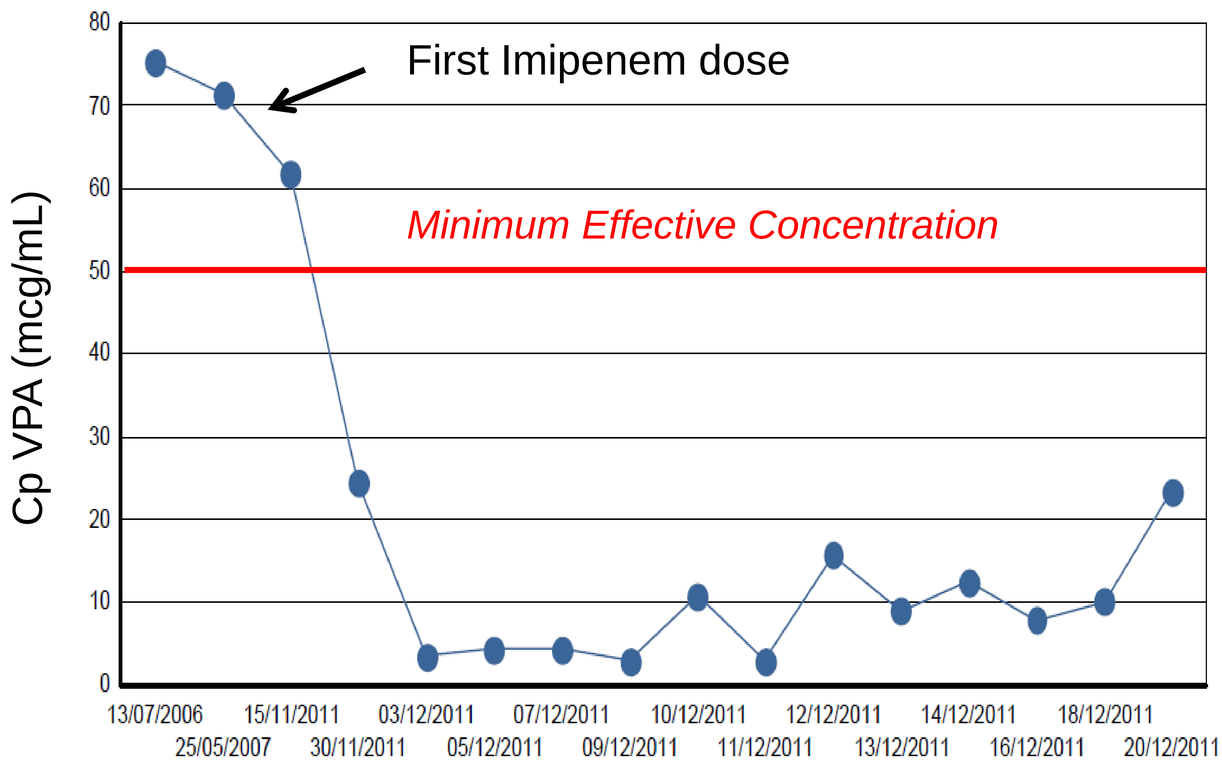

Fig. 1: VPA Plasmatic concentration

CONCLUSIONS.

Given the magnitude of the reduction in plasma levels, the speed with which it appears and the difficulty to get back at TI, we think that monitoring and dose adjustments are not useful to manage this interaction. Should be considered changing anticonvulsivant or antibiotic treatment.