clinical cases DDIs

Date of report 22 Jun 2020

Reported case interaction between **Cobicistat** and **Paliperidone**

Drugs suspected to be involved in the DDI

Perpetrator
Cobicistat

Daily Dose
150 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
Jan. 1, 2019

End date
Ongoing

Victim
Paliperidone

Daily Dose
150 (mg)

Dose adjustment performed
No

Administration Route
Intramuscular

Start date
Jan. 1, 2020

End date
Jan. 5, 2020

Complete list of drugs taken by the patient

Antiretroviral treatment

Dolutegravir
Darunavir (with Ritonavir or Cobicistat)

Complete list of all comedications taken by the patient, included that involved in the DDI

Paliperidone 12mg/d Lorazepam 5mg/d Mirtazapine 30mg/d Levomepromazin 25 mg/d

Clinical case description

Gender

Male

Age

50

eGFR (mL/min)

>60

Liver function impairment

No

Description

50-year-old HIV positive patient. Multiple virological failures with multi-drug resistant HIV strain, and reduced ARV options. Undetectable on DRV/c + dolutegravir. Clinical history relevant for chronic delusional syndrome treated orally by paliperidone, levomepromazin, mirtazapine and lorazepam. Admitted to psiquiatry depertment due to acute psychotic decompensation. The patient refused oral medication, so intramuscular paliperidone was chosen. The patient received paliperidone 150mg IM at admission, and 100mg IM 4 days later. Clinical response was appropriate, without evidence of paliperidone toxicity. Although paliperidone is primarily eliminated renally, with minimal metabolism occurring via CYP2D6 and CYP3A4, a high IM dose combined with Darunavir/cobicistat could potentially increase paliperidone

exposure, and lead to side effects, but they were not seen in our case.

Clinical Outcome

No unwanted outcome

Editorial Comment

This case reveals no unexpected side effects between darunavir/cobicistat and paliperidone. The dose chosen is in the lower rank of the dose recommendation. Interestingly QTc interval monitoring should be recommended in those patients as a potential severe side effect.

University of Liverpool Recommendation

⚠ Potential interaction likely to be of weak intensity. Additional action/monitoring or dosage adjustment is unlikely to be required

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