clinical cases DDIs

Date of report 31 Jan 2020

Reported case interaction between **Cobicistat** and **Duloxetine**

Drugs suspected to be involved in the DDI

Perpetrator
Cobicistat

Daily Dose
150 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
April 25, 2018

End date
Ongoing

Victim
Duloxetine

Daily Dose
120 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
June 4, 2019

End date
Ongoing

Complete list of drugs taken by the patient

Antiretroviral treatment

Darunavir/Cobicistat

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

duloxetine 120 mg qd lormetazepam 2mg qd omeprazol 20mg qd gabapentin 200mg qd paracetamol on demand

Clinical case description

Gender

Male

Age

59

eGFR (mL/min)

>60

Liver function impairment

No

Description

59-year-old HIV positive patient, known for HIV infection on ART. Undetectable on DRV/c as monotherapy (the patients doesn’t want to modify regimen). Depressive syndrome was diagnosed by his primary physician, starting duloxetine 60mg/d, soon increased to 120mg/d in June 2019. Duloxetine is metabolized by CYP2D6 and CYP1A2, thus Darunavir/cobicistat could potentially slightly increase duloxetine concentration as cobicistat is a weak inhibitor of CYP2D6. However, despite being receiving the highest recommended dose (120 mg daily), no adverse events were observed.

Clinical Outcome

No unwanted outcome

Editorial Comment

This is a nice case showing that what may be defined as a "potential weak interaction" can be managed in a tailored way. A PLWH already on cobicistat boosted darunavir started duloxetine at 60 mg; after reporting no side effects the dose was increased to 120 mg and, after a follow up of almost 8 months, no side effect emerged. In cases of weak interaction with drugs lacking a narrow therapeutic index titration of the victim drug is a potential option when alternative are lacking.

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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