clinical cases DDIs

Date of report 02 Sep 2021

Reported case interaction between **Doravirine** and **Atorvastatin**

Drugs suspected to be involved in the DDI

Perpetrator
Doravirine

Daily Dose
100 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
June 9, 2021

End date
Ongoing

Victim
Atorvastatin

Daily Dose
10 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
Dec. 1, 2019

End date
Ongoing

Complete list of drugs taken by the patient

Antiretroviral treatment

Doravirine
Dolutegravir

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

atorvastatin acenocoumarol bisoprolol carbidopa/levodopa enalapril furosemide gabapentin glicazide spirololactone tamsulosin tramadol

Clinical case description

Gender

Male

Age

83

eGFR (mL/min)

60-30

Liver function impairment

No

Description

83-year-old HIV patient with several revelant comorbidities (chronic kidney disease, stroke, cognitive impairment, Parkinson, diabetes mellitus) and relevant polypharmacy. He was on ART containing etravirine 200mg bid and raltegravir 400mg bid to avoid drug-drug interactions for several years, but he was taken a huge number of different pills. The patient requested a potential change in ARV regimen to reduce pill burden. ART was then modified to doravirine plus dolutegravir, which was expected to retain the same antiretroviral activity compared to previous regimen, and had a reduced number of daily pills. Although dose changes of the statine are not recommended, doravirine may decrease 33% of atrovastatine Cmax and also slightly the AUC; he was on

low dose of atorvastatine (10mg), but this treatment was very relevant given his previous medical history. Three months after ART modification, HIV-1 viral load remained undetectable, cholesterol levels have not changed and the patient is very satisfied with the reduced pill burden of the ART regimen. Doravirine-dolutegravir combination is a promising high genetic barrier, sparring NRTIs, with low potential for relevant drug-drug interactions two-drug ARV combination. It could be an interesting ART regimen for older PLWH with polypharmacy and comorbidities.

Clinical Outcome

No unwanted outcome

Editorial Comment

Changes in atorvastatin concentration observed when co-administered with doravirine are not clinically significant. No dose adjustment is required.

University of Liverpool Recommendation

- No clinically significant interaction expected

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