clinical cases DDIs

Date of report 06 Feb 2020

Reported case interaction between **Raltegravir** and **Rifampin**

Drugs suspected to be involved in the DDI

Victim
Raltegravir

Daily Dose
800 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
Dec. 9, 2018

End date
Ongoing

Perpetrator
Rifampin

Daily Dose
750 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
April 9, 2019

End date
Dec. 15, 2019

Complete list of drugs taken by the patient

Antiretroviral treatment

Raltegravir
Emtricitabine/Tenofovir-DF

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

Rifampin, isoniazid, pyrazinamide, ethambutol, pyridoxine, trimethoprim-sulfamethoxazole

Clinical case description

Gender

Male

Age

38

eGFR (mL/min)

>60

Liver function impairment

No

Description

38-year-old male diagnosed with HIV infection in December 2018 (CD4 count of 136 cells/mm3). After 4 months of initiating treatment with RAL + FTC/TDF, he presented lymph node tuberculosis. Treatment was started with isoniazid/ rifampicin/pyrazinamide and ethambutol. The patient had a good clinical response and ART maintained effectiveness despite maintaining the standard dose of raltegravir (400 mg bid).

Clinical Outcome

No unwanted outcome

Editorial Comment

The recommended dose of raltegravir should be 800 mg twice daily. Coadministration of rifampicin and raltegravir decreases raltegravir concentrations (AUC by 40%, Cmax by 38% and Cmin by 61%). An interaction study has shown that, when compared to a standard dose of raltegravir (400 mg twice daily), 800 mg twice daily decreased raltegravir trough concentrations by 53%, but increased AUC and Cmax by 27% and 62%, respectively and thus did not overcome the effect of rifampicin on though concentrations.

University of Liverpool Recommendation

■ Potential interaction - may require close monitoring, alteration of drug dosage or timing of administration

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