clinical cases DDIs

Date of report 13 Oct 2020

Reported case interaction between **Doravirine** and **Omeprazol**

Drugs suspected to be involved in the DDI

Victim
Doravirine

Daily Dose
100 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
Feb. 19, 2020

End date
Ongoing

Perpetrator
Omeprazol

Daily Dose
80 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
Feb. 19, 2020

End date
Ongoing

Complete list of drugs taken by the patient

Antiretroviral treatment

Doravirine
Dolutegravir
Emtricitabine/Tenofovir-AF

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

Omeprazol, propranolol

Clinical case description

Gender

Male

Age

43

eGFR (mL/min)

>60

Liver function impairment

Yes

Child-Pugh

Child-Pugh A

Description

43 year-old patient with HIV/HCV infection. In February 2020 HIV infection is well controlled (pVL<20 copies/mL) on cART with dolutegravir plus rilpivirine/FTC/TAF (RAMs in complied genotypes RT: 41L, 67N, 70R, 103R, 184V, 188L, 210W, 215Y; PRO: 10I, 46I, 54L, 63P, 71V, 84V, 90M; IN: wild-type). HCV coinfection (SVR since 2015) with liver cirrhosis (Child-Pugh A) and oesophageal varices. Concomitant treatment with famotidine and propranolol. Upper gastrointestinal bleeding in February 2020. Gastroenterologists wanted to prescribe high doses of omeprazol instead of famotidine. Etravirine and dolutegravir co-administration is not recommended without a

protease inhibitor, and the patient had prior history of allergic vasculitis while on protease inhibitors. In this context, rilpivirine was changed to doravirine (early access program), maintaining dolutegravir and FTC/TAF. By June 2020 the patient is tolerating well the new treatment, pVL remains undetectable, and no new bleeding episode has occurred.

Clinical Outcome

No unwanted outcome

Editorial Comment

The case is really interesting and challenging in terms of ARV management, due to the limited options available for this patient. Although the probability of a significant DDI between omeprazol and doravirine is very low, this co-administration has not been studied. Given the limited available data with this co-administration, the case can be useful for clinicians. It illustrates that doravirine can be an alternative to rilpivirine when omeprazole (or other PPI) is required. Given the high genetic barrier of doravirine, this change is also safe in terms of virological suppression.

University of Liverpool Recommendation

- No clinically significant interaction expected

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