Date of report 13 May 2021

Reported case interaction between **Efavirenz** and **Ginkgo biloba**

Drugs suspected to be involved in the DDI

Victim
Efavirenz

Daily Dose
600 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
Unknown

End date
Unknown

Perpetrator
Ginkgo biloba

Daily Dose
480 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
Unknown

End date
Unknown

Complete list of drugs taken by the patient

Antiretroviral treatment

Efavirenz
Abacavir/Lamivudine

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

Ginkgo biloba

Clinical case description

Gender

Male

Age

47

eGFR (mL/min)

>60

Liver function impairment

No

Description

47 years old HIV+ male. HIV-1 infection was diagnosed in 2017. Soon after cART was initiated with efavirenz (600 mg, QD) + abacavir/lamivudine (600/300 mg, QD), achieving undetectable HIV-1 RNA and CD4+ T-cells count above 700 cells/mm3. In May and June 2019 he presented with low level viremia (HIV-1 RNA 210 copies/mL and 230 copies/mL, respectively). Due to anxiety, patient reported herbal supplement/medication intake, namely Ginkgo biloba (160 mg, 3 times per day). TDM was performed and the efavirenz plasma Ctrough was 873, 19 ng/mL. The physician indicated to withdraw this herbal supplement and 3 months later plasma HIV-1 RNA returned to undetectable.

Clinical Outcome

Loss of efficacy

Drug Interaction Probability Scale (DIPS)

Score

5 - Probable

Editorial Comment

Coadministration is not recommended as efavirenz concentrations may be decreased (as it occurred in this clinical case) due to potential induction of CYP3A4 or CYP2B6 by Gingko biloba. A similar case report also described lower efavirenz plasma concentrations in a patient who started taking Gingko biloba, which coincided with an increasing viral load. Interaction of Ginkgo biloba with efavirenz. Wiegman DJ, Brinkman K, Franssen EJF. AIDS, 2009, 23(9): 1184-1185.

University of Liverpool Recommendation

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

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