clinical cases DDIs

Date of report 22 Jun 2020

Reported case interaction between **Ritonavir** and **Triamcinolone**

Drugs suspected to be involved in the DDI

Perpetrator
Ritonavir

Daily Dose
200 (mg)

Dose adjustment performed
No

Administration Route
Oral

Start date
June 1, 2002

End date
Ongoing

Victim
Triamcinolone

Daily Dose
40 (mg)

Dose adjustment performed
No

Administration Route
Other

Start date
June 18, 2019

End date
June 18, 2019

Complete list of drugs taken by the patient

Antiretroviral treatment

Darunavir (with Ritonavir or Cobicistat)
Etravirine

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

Triamcinolone; Metformin (850 mg /12h); Enalapril 10 (mg/12h); Atorvastatin (40 mg/24h)

Clinical case description

Gender

Male

Age

53

eGFR (mL/min)

>60

Liver function impairment

No

Description

53 years old man diagnosed with HIV in 1993. ART was initiated in 1993 and he has needed several changes of the ART regimens because virological failures and resistance selection. Since 2006 plasma viral load is persistently undetectable. Current ART (DRV/r 600/100 mg BID + ETR 200 mg BID) was initiated in 2009. Current CD4+ T cell count is 583/µL (29%). He also presents other co-morbidities: obesity (BMI 29.26), diabetes mellitus, dyslipidemia and hypertension. In June 2019 he was diagnosed with subacromial subdeltoid bursitis that was treated with triamcinolone (40 mg, single dose) administered as subacromial bursa injection. Despite the interaction between triamcinolone and darunavir/ritonavir (Triamcinolone is metabolised by CYP3A4 and coadministration with ritonavir-

boosted darunavir can highly increase concentrations of triamcinolone and cause Cushing syndrome and/or adrenal suppression) this treatment was well tolerated and no adverse effects were observed.

Clinical Outcome

No unwanted outcome

Editorial Comment

Coadministration is not recommended unless the potential benefit of treatment outweighs the risk of systemic corticosteroid effects. Triamcinolone is metabolised by CYP3A4 and coadministration with boosted PIs could increase concentrations of triamcinolone. There are several case reports of Cushing's syndrome with the use of intra articular triamcinolone injections in patients on boosted PIs, even after a single dose (as in this clinical case). A reduced dose of methylprednisolone has been suggested as a possible safer alternative to triamcinolone injection although there is insufficient information to indicate whether other injectable steroids present a lower risk than triamcinolone.

University of Liverpool Recommendation

- These drugs should not be coadministered

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