Darunavir / Cobicistat Pharmacological Interactions: Clinical Relevance and Action Mechanism.

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Background

- Darunavir/Cobicistat (DRV/COB) is the first fixed combination inhibitor of protease. Both are metabolized by the cytochrome CYP3A4, reason why they are susceptible to present multitude of drug interactions (DI).

Purpose

- To describe the DI of DRV/COB in HIV patients to avoid then and to optimize therapy.

Material and Methods

- Retrospective observational study performed in a county hospital.
- We review hiv-druginteractions.org, interactions database of the University of Liverpool.
- The pharmaceutical intervention (PI) was to notify to the prescribing physician, by report attached in the patient's medical record, the contraindicated interactions (CI).

Results

- 35 patients, 51% men (n = 18). Race: 54% non-Caucasian (n = 19). Median age 37 years [IQR 64-20]. Median days of treatment 195 [IQR 465-22], total of concomitant medications 199, median 5 [IQR 1-19], DI 31% (n = 62) median 1 [IQR 0-8], 40 drugs involved in DI.

- PI: accepted 3 (50%) ➔ INTERVENTIOS ➔ simvastatin ➔ rosuvastatin phenobarbital ➔ levetiracetam midazolam ➔ lormetazepam

Conclusion

- A high rate of DI is observed in patients receiving treatment with DRV/COB.
- The most relevant interactions are observed at the level of the CYP3A family. Acceptance of PI was low in the case of CI detected, probably because it did not come to the prescribing physician’s knowledge.
- The pharmacist is important to optimize drug therapy.

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