BACKGROUND

Doravirine (DOR) is a newly approved antiretroviral belonging to the class of non-nucleoside reverse transcriptase inhibitors (NNRTIs). In the phase 3 trial DRIVE-AHEAD, DOR in combination with 3TC and TDF showed minimal changes in lipid profile compared with EFV/FTC/TDF. In the phase 3 DRIVE SHIFT trial the switch to DOR/3TC/TDF showed reduction in fasting lipids.

AIM

Our aim was to investigate the role of switching to a doravirine DOR-based regimen on metabolic and hepatic safety in a real-life setting. We compared DOR patients with a cohort of subjects switching to rilpivirine based regimen.

PATIENTS & METHODS

128 and 331 subjects were enrolled, respectively, in the DOR and RPV cohorts (Table).55 (43.0%) patients on DOR were on 3TC/TDF/DOR regimen (DOR1), and the remaining were in other DOR-based regimens (DOR2). The mean age of patients in DOR1 was lower (46.7 vs 59.5), and they were less frequently switching from integrase inhibitors (36% vs 57%). At baseline, DOR patients were older, with higher BMI, and more frequently treated with lipid-lowering drugs and switching from PI and INI. In the first year of observation, 12(9.3%) patients on DOR interrupted the treatment vs 39 (11.7%) on RPV. Changes from baseline to T1 showed significantly decreasing total cholesterol (TC), LDL-c, TC/HDL-c ratio, and triglycerides, both in all patients and in those not on lipid-lowering treatment. A more marked improvement in lipid profile in the DOR group is suggested by the deeper TC/HDL-c ratio decrease seen in this group.

Patients in DOR1 showed a significant reduction in TC and LDL-c. Weight did not change. Both DOR and RPV subjects showed a slight increase in ALT, when baseline levels were <40 UI/L. On the contrary, when ALT was >40 UI/L, the DOR group significantly reduced ALT levels.

RESULTS

CONCLUSIONS

In both groups (DOR and RPV), patients showed a significant reduction in TC, LDL-c, TC/HDL-c ratio, and triglycerides. A deeper TC/HDL-c ratio decrease was observed in the DOR group. Patients in DOR1 showed a significant reduction in TC and LDL-c with respect to DOR2. Moreover, the DOR group showed a significant reduction in ALT levels when ALT were >40 UI/L at baseline.

DISCLOSURES

The authors declare to have no conflicts of interest.

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