MODIFICATION ON FASTING LIPID AND RENAL PARAMETERS IN PATIENTS SWITCHING FROM TENOFOVIR DISOPROXIL TO TENOFOVIR ALAFENAMIDE

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BACKGROUND

Tenofovir alafenamide (TAF) in clinical trials demonstrated less impact than tenofovir disoproxil (TDF) on affecting renal and bone parameters, whereas TDF protects from hypercholesterolemia and hypertriglyceridemia.

PURPOSE

To analyse how renal function and fasting lipid parameters are modified when switching TDF to TAF. As a second aim, evaluate effectiveness and immunological system.

METHODS

Retrospective observational study
July 2016 – August 2018

≥6 months TDF ➔ TAF >48 weeks

Virological-success: HIV-1 RNA <35copies/ml

Follow-up variables
- Serum-creatine, phosphatemia, glomerular filtration rate (GFR)
- Total cholesterol (TC), HDL, LDL, triglycerides
- CD4+, HIV RNA

Statistical data (SPSS®)
- 2-sided t-student test for pre-post variables except GFR
- 2-sided Wilcoxon signed-rank test for GFR
- Pearson correlation coefficient for TC, HDL and LDL

RESULTS

Demographic data
48 patients (79,2% men)
44 years (21-70 years)
92% emtricitabine-elvitegravir-cobicistat

• Phosphatemia, LDL and TG increased with TAF ➔ No significant differences.
• GFR ➔ No statistical differences.
• Cholesterol correlated with LDL but not with HDL.
• All patients achieved virological-success.

CONCLUSION

After 48 weeks of patients, in clinical practice, who just changed TAF on their ART, 100% of patients archived virological-suppression, with reduction of serum-creatine and improvement immunological system, nevertheless hypercholesterolemia was observed based mainly on LDL elevation.