Problems related to medication and clinical characteristics in patients older than 50 years with HIV/AIDS newly diagnosis

**BACKGROUND**

- Elderly patients with HIV/AIDS in Colombia is in upward trend, this being a population that has greater comorbidities and formulated drugs leading to an increased risk of medication-related problems when combined with antiretroviral therapy. The aim of this study is to describe the clinical characteristics and prevalence of medication related problems in elderly HIV/AIDS patients in Medellin, Colombia.

**METHODS/DESCRIPTION**

- We conducted a multicenter retrospective study including all elderly patients newly diagnosed with HIV/AIDS in 3 centers in Medellin, Colombia between January 2013 and December 2016, evaluating clinical and laboratory characteristics, Charlson comorbidity index and medication-related problems (drug-drug interactions, polypharmacy, potentially inappropriate medication and anticholinergic load).

**RESULTS**

We included 240 patients of which 196 (81.67%) were male, median of age 54 years (IQR 52-59 years), most were in stage 3 (130, 54.17%) and 97 patients (40.42%) had some defining AIDS condition, the most frequent being wasting syndrome (51, 21.25%) and pulmonary and extrapulmonary tuberculosis (33, 13.75%). The median CD4 cell count was 226 (IQR 84-418) and viral load 77,888 copies/ml (IQR 20608-242000) at the time of diagnosis. Non-infectious comorbidities occurred in 144 patients (60%), the most common being arterial hypertension (61, 25.42%) followed by dyslipidemia (44, 18.33%). The median of the Charlson comorbidity index was 7 (IQR 1-7). The 79.47% received antiretroviral treatment based on NNRTI (EFV) being the most frequently formulated treatment TDF/FTC/EFV (41.48%). Problems related to medication were found in 63.75% of the population. Patients ≥60 years had a higher frequency of problems related to medication compared to those under 60, but this difference was not statistically significant (73.54% vs. 60.96%, p = 0.092). When comparing the characteristics evaluated between patients under and over 60 years, statistically significant differences were found in the percentage of AIDS defining disease (p = 0.007) and the presence of non-infectious comorbidities (p = 0.01), with a higher frequency in the group of patients with an age ≥60 years.

**CONCLUSION**

- The elderly population with HIV/AIDS in Medellin, Colombia is diagnosed in advanced stages of their disease and with a high burden of non-infectious comorbidities that may be involved in the high percentage of problems related to medication found in this study. The impact that this can have on important outcomes must be sought.