Comprehensive and multidisciplinary assessment of HIV-infected population aged 60 years or older (Over60 cohort)

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BACKGROUND

➢ HIV-infected population is aging in those countries in which effective antiretroviral therapy is available

➢ Consequently, one of the main concerns of physicians during the last decade has been the management of age-related comorbidities

➢ However, aging does not only imply morbidity, as well as morbidity does not always mean aging.

➢ Aging process, in a subject over time, encircles physical/functional, phychological and social changes

OBJECTIVES

In order to better manage our elderly population of subjects infected by HIV, the objective of this study is

to determine and compare the prevalence of morbidities and other age-related conditions between HIV-infected subjects aged 60 years or older and age- and gender-matched HIV-uninfected people.

STUDY DESIGN and POPULATION

This is a **cross-sectional cohort study** designed to compare two cohorts:

HIV-infected

HIV-uninfected

• Over60 Cohort is an ongoing prospective cohort that includes all those HIV-infected people attended in our Unit, aged 60 years old or older, who accept to participate.

• HIV-uninfected subjects, **matched by age and gender**, are being included from a center of Primary care with a ratio 2 to 1 (2 cases, 1 control)

METHODS

… carrying on a comprehensive geriatric assessment including medical, psychological/mental, functional and social aspects.

MEDICAL:
- Comorbidities and age-related conditions,
- Polypharmacy and
- Drug-drug interactions

PSYCHOLOGICAL:
- Adherence to ARV (adapt SERAD cuestionnaire, 2007)
- Depressive symptoms (GDS, 1983)
- Quality of life (adapt MOS-VIH, 1991)
- Cognitive impairment (Simioni y col, 2010)
- Cognitive reserve (CRC 2011)

FUNCTIONAL :
- Barthel and Lawton tests
- Subjects at high risk: Barber test
- Frailty.

Physiological habits
- Nutricional test
- Sleep disorders: PittsburggTest
- Urinary incontinence: Lagro-Janssen test

Other geriatic syndromes
-Sensorial tests: HDD (hear), visual
- Tinetti test
- Risk of falls: SSPB and Gait speed, Get up and go tests

SOCIAL (financial situation, isolation):
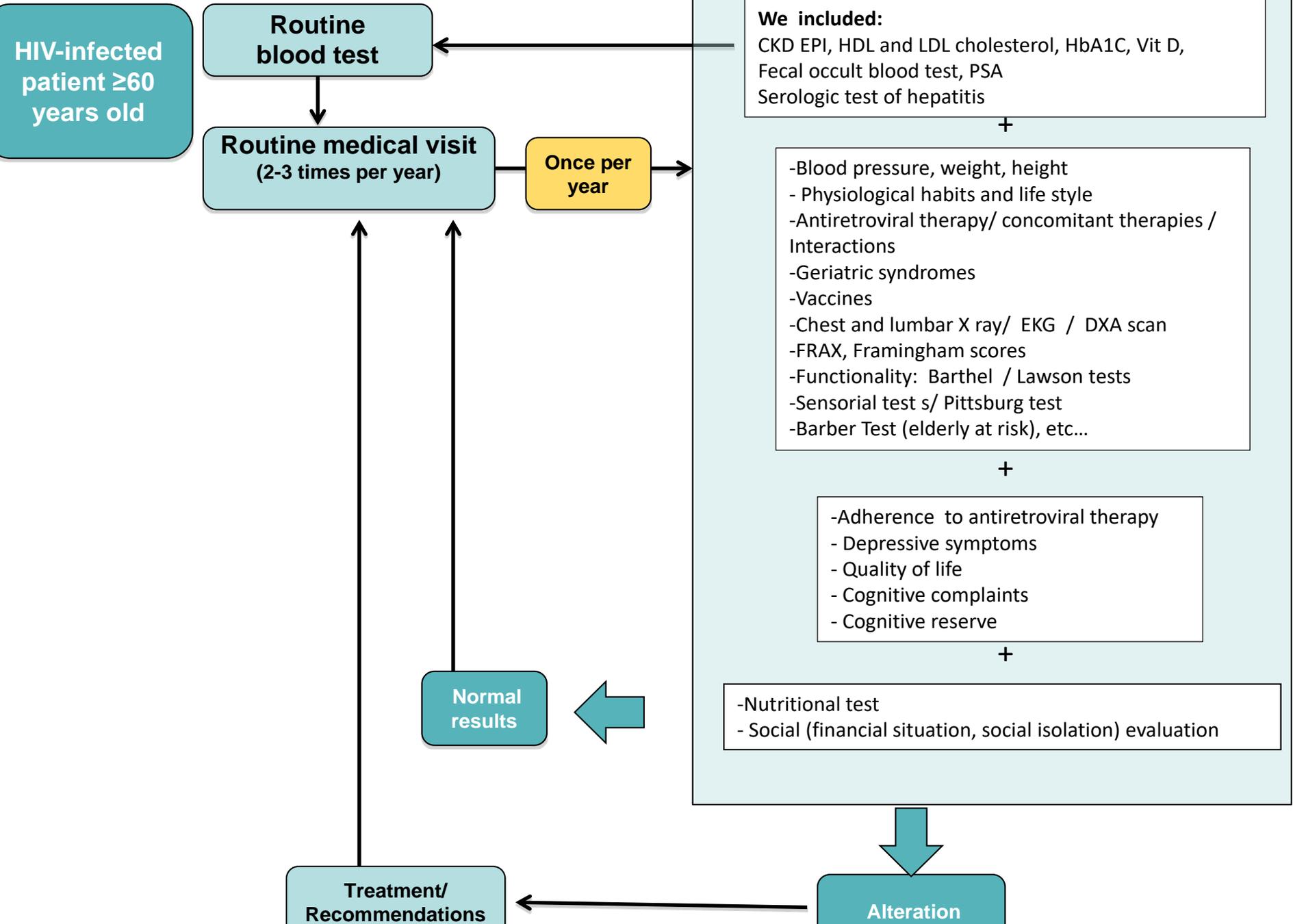- OARS and Yessavage tests

Other evaluations:
- Blood and urine test,
- DXA scan,
- EKG and
- Chest and lumbar spine X ray.

Immunological characterization:
- Immune activation,
- Immune senescence
- Inflammation markers.

HIV-infected patient ≥60 years old

Routine blood test

Routine medical visit (2-3 times per year)

Once per year

We included:
CKD EPI, HDL and LDL cholesterol, HbA1C, Vit D,
Fecal occult blood test, PSA
Serologic test of hepatitis

+

-Blood pressure, weight, height
- Physiological habits and life style
-Antiretroviral therapy/ concomitant therapies / Interactions
-Geriatric syndromes
-Vaccines
-Chest and lumbar X ray/ EKG / DXA scan
-FRAX, Framingham scores
-Functionality: Barthel / Lawson tests
-Sensorial test s/ Pittsburg test
-Barber Test (elderly at risk), etc…

+

-Adherence to antiretroviral therapy
- Depressive symptoms
- Quality of life
- Cognitive complaints
- Cognitive reserve

+

-Nutritional test
- Social (financial situation, social isolation) evaluation

Normal results

Treatment/ Recommendations

Alteration

METHODS

- We included in this analysis **the first 62 HIV-infected patients and 32 controls** included in both cohorts from January 2016 until May 2017.

Definitions:

- The term **comorbidities** includes: CVD, liver disease, neoplasms, osteoporosis, renal impairment, neurocognitive impairment, infections, immune illness, etc...), and excludes HIV-infection.

- **Age-related conditions**: any comorbidities plus geriatric syndromes [falls, urinary incontinence, sleep difficulties, sensory impairment (visual or hearing), depression, cognitive impairment, malnutrition, sarcopenia, functional impairment and frailty].

RESULTS

Epidemiological, clinical, psychological and social data

	62 HIV-infected	32 controls
Age, years (mean [SD])	73.4 ($\pm$5.6)	74,2 ($\pm$5,6)
≥70 years old (%)	**81.1**	**87,8**
Gender (male) (%)	86.8	87,8
Married (%)	**58.5**	**81,8**
Time since HIV diagnosis, years (mean [SD])	18.5 ($\pm$9.9)	--
Patients receiving antiretroviral therapy (%)	100	--
<95% adherence levels to antiretrovirals (%)	5.6	--
Comorbidities, excluding HIV (mean)	**2.9**	**1.3**
≥ 3 Comorbidities (%)	**68.3**	**29.4**
Depressive symptoms (%)	22.2	12,1
Poor or very poor quality of life (%)	**16.7**	**6.3**
Cognitive symptoms (%)	**22.2**	**9.4**
Cognitive reserve (mean) [a]	11	ND
Unsatisfactory social environment (Yessavage) (%)	29.03	25.8

RESULTS

Functional results and other geriatric syndromes.

	62 HIV-infected	32 controls
Prefrail (%)	**44.0**	**21.8**
Frail (%)	8.0	6.3
Altered Lawton test (Instrumental Activities of Daily Living) (%)	3.7	3.2
Altered Barber test (elderly at risk) (%)	14.8	12.9
Hearing impairment (%)	41.2	54.8
Visual impairment (%)	20.3	21,8
Urinary incontinence (Lagro-Janssen) (%)	9.1	6,1
Sleep disturbances (Pittsburg) (%)	**66.2**	**48.4**
Risk of falls (SSPB, Gait speed, Get up and go tests) (%)	**26.08**	**12,2**

LIMITATIONS

- The small sample size of the cohort is a limitation of the study

- However, this is an **ongoing** cohort that include:

  - A deep **comprehensive multidisciplinary** assessment

  - An **uninfected control group** matched by gender and age.

CONCLUSIONS

➤ This comprehensive and multidisciplinary assessment of our elderly patients shows:

    ➤ A higher prevalence of HIV-infected subjects, with respect those uninfected, have:

        ➤ comorbidities and some geriatric syndromes

        ➤ poor or very poor quality of life

        ➤ cognitive symptoms

        ➤ subjects considered prefrail.

    ➤ Almost a third of them showed an unsatisfactory social environment.

A specific management of aging HIV-infected people could reduce morbidities and mortality, as well as improve functional parameters and daily living.

Thank you