



EDITORIAL – IMPROVING ACCESS AND ADHERENCE TO SCREENING TESTS FOR CANCERS: A NEW, THOUGH OLD, CHALLENGE IN THE HIV EPIDEMICS

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Editorial

Since the introduction of Highly Active Anti-Retroviral Therapy (HAART) in 1996, life quality and life expectancy of People Living with HIV (PLWH) dramatically improved. An infection leading to death in just after a few months after the first appearance of its symptoms became a chronic infection, which allowed to lead an almost normal life to people who acquired it. Consequently, we assisted to an increase of chronic pathologies, associated to ageing, to the natural history of the HIV infection and to adverse effects of the drugs¹⁻⁶.

Among the chronic disorders, which prevalence has increased in PLWH, we find neoplasms⁷⁻¹¹. In the last twenty years, the so-called post-HAART era, the incidence of AIDS-defining cancers, such as Kaposi's Sarcoma (KS), Non-Hodgkin Lymphoma (NHL) and HPV-related cervical cancer, has reduced, even though it is still higher than the general population. On the other hand, the incidence of non-AIDS-defining cancers (NADCs), e.g. lung cancer, skin cancer, prostate cancer, breast cancer, anal cancer, colon cancer, and hepatocellular carcinoma (HCC), increased^{12,13}.

The HIV infection alone is a risk factor for cancers, being them related to persistent inflammation and immune dysregulation. As a matter of fact, HIV protein *tat* action leads to an increase of pro-inflammatory cytokines such as IL-6, IL-8, IL-12 and TNF- α . A high concentration of this cytokines is often found associated to pre-malignant mucosal lesions.

Moreover, PLWH are more often smokers and alcohol consumers than the general population, adding other risk factors to an already unbalanced scale. It is then easy to see how PLWH are in constant need of being screened for cancers. A need that is recognized by the scientific community, which clearly regulated times and ways to perform said screening tests including them in international and national guidelines¹⁴⁻¹⁶.

Screening tests used to early detect neoplasms in PLWH are the same tests applied to the general population: mammography for breast cancer in women aged 50-70 in Europe or more than 40-year-old in the United States; digital rectum examination (DRE) and prostate specific antigen (PSA) to detect prostate cancer in men aged > 50 years; fecal occult blood, flexible recto-sigmoïdoscopy and colonoscopy for colorectal cancer in people aged 50-75 years in Europe or > 50 years in the US; low-dose CT chest scan for lung cancer in people smoking more than 30 pack/years or ex-smokers who quit less than 15 years before the examination; Papanicolaou (PAP) test and colposcopy to identify cervical squamous cell cancer; PAP test and high resolution anoscopy to detect anal cancer, especially in men who have sex with men (MSM) and women with a positive cervical PAP test. The timings are slightly different, though: it is recommended for PLWH to undergo screening tests more often than the general population, once a year for most of them^{14, 16} (Table 1). However, access and adherence to screening tests



TABLE 1. Screening tests differences between general population and PLWH.

Cancer	Screening Test	General Population	PLWH
Anal	Anal PAP test	Not recommended	MSM, once a year
	Anoscopy		Women with abnormal cervical PAP smear, once a year MSM, if abnormal PAP smear
Breast	Mammography	Women > 50-year-old, every two years	Women > 50-year old, once a year
	Breast MRI	high-risk < 40-year-old	
Cervical	PAP test	Women > 25-year-old, every two years	Once a year after HIV
	Colposcopy	If abnormal PAP test	infection diagnosis
Colorectal	FOB	Every year	Same as general population
	Rectal sigmoidoscopy	Every five years	
	Colonoscopy	Every ten years	
Hepatocellular	Hepatic ultrasounds	If liver cirrhosis for every cause	If HIV/HCV or HIV/HBV coinfection, with cirrhosis
	α -fetoprotein	If HBV or HCV infection	If HIV/HBV coinfection, when HBV-DNA is detectable
		If Asian, men > 40-year-old or women > 50-year-old	Every 6-12 months
		Every 6 months	
Lung	Low-dose CT chest scan	> 55-year-old with > 30 pack/year smoking history Active or cessation < 15 year	> 40-year-old with > 30 pack/year smoking history Active or cessation < 15 year Once a year
Prostate	DRE	Population-based screening	Men > 50-year-old
	PSA	is not recommended (IC)*	Once a year

*Parker C, Gillessen S, Heidenreich A, Horwich A. Cancer of the Prostate: ESMO Clinical Practice Guidelines. Ann Oncol 2015; 26: v69-v77.

are often suboptimal and PLWH still come to a doctor attention when they are symptomatic, complaining of loss of weight, asthenia and fever despite their adherence to the combined Anti-Retroviral Therapy (cART). Sadly, their complaints often come from an advanced stage neoplasm. Moreover, PLWH are ever more frequently affected than the general population by rare and more aggressive forms of tumors, such as HPV-related head and neck squamous cell carcinoma (HNSCC) and bladder carcinoma, for which screening tests are not yet available¹⁷. It is clear how, in this age full of technological revolutions, with new drugs and new methods of administration, we should try to achieve the highest screening coverage for the wellbeing of our patients. It is not admissible anymore to lose a battle without even trying to fight it.

CONFLICT OF INTERESTS

The authors declared no conflict of interests.

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