CENTRO HOSPITALAR DE LISBOA CENTRAL, EPE

Risk factors for loss to follow-up after a positive HIV test at the Emergency Department: a case-control study, 2010-2014

[redacted]

BACKGROUND

Following HIV diagnosis, prompt linkage to clinical appointments is of the utmost importance in guaranteeing timely anti-retroviral therapy (ART) and focused care. HIV infection is frequently diagnosed in the context of emergency department (ED) visits motivated by acute illness. This is often the case concerning patients who are less prone to seek screening for attend general clinical care, who may be then less likely to be retained in care and thus at higher risk of suffering adverse outcomes and causing further HIV transmission.

The objective of this study was to explore which features of patients newly diagnosed with HIV at the ED are associated with loss to follow-up (LTFU).

METHODS

Our study performed a retrospective analysis using a case-control design. We explored clinical data concerning newly diagnosed HIV cases at a major teaching hospital's ED in Lisbon, between 2010 and 2014. Patients hospital charts and Si.vida data (national electronic registry for HIV patients) for all patients with a positive HIV screen were reviewed.

We excluded patients who had already been previously diagnosed with HIV infection. Patients with a newly positive HIV screen who hadn't presented for care in the 6 months before data analysis (October 2015) were considered LTFU (cases). Those who had presented to outpatient appointments and/or were known to be taking ART in the 6 months before the analysis were considered to be in care (controls). Deceased patients were excluded from the study analysis. Demographic, epidemiological and clinical characteristics were evaluated as potential predictors of LTFU using logistic regression.

RESULTS

From 2010 to 2014, 161 patients attending our ED had a newly positive HIV ELISA screen (Table 1). The main category of virus acquisition was heterosexual transmission (n=63; 39.1%), followed by homosexual (n=54; 33.5%) and intravenous drug use (n=23; 14.3%). Sixty-four patients (39.8%) were migrants, i.e., of non-Portuguese origin.

Laboratorial assessment of immune status was available in 138 patients (85.7%). Median CD4 count was 132 cells/µL (IQR 37-335). Approximately half of all patients (n=82; 50.9%) were admitted as in patients following ED presentation.

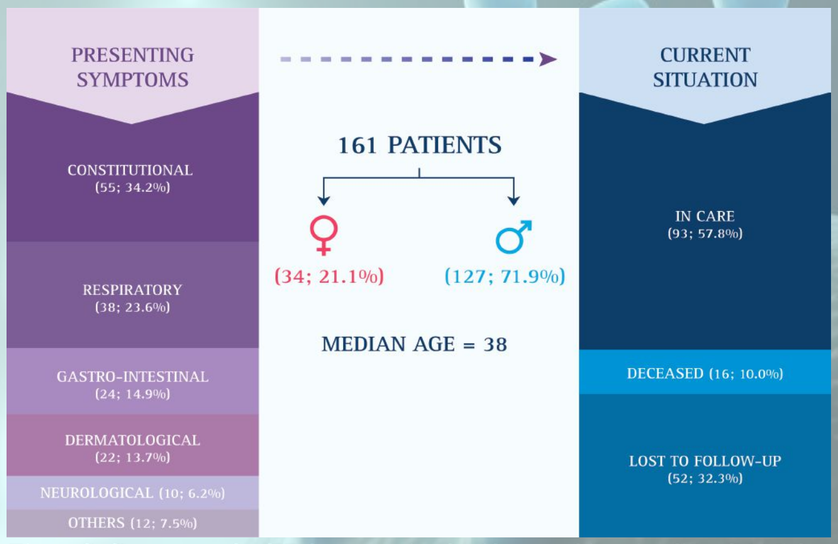

Figure 1: Symptoms on ED presentation and current situation (Oct 2015)

Patient feature	Odds Ratio 95% CI	P value
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
Migrant	**2.83 [1.4-5.6]**	**0.003**
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]
Dermatological symptoms	**2.48 [1.0-6.2]**	**0.05**
[redacted]	[redacted]	[redacted]
Inpatient admission	**0.5 [0.3-1.0]**	**0.04**

Table 1: Predictors of loss to follow-up on univariate logistic regression

CONCLUSIONS

In this setting, being migrant and presenting at the ED due to dermatological symptoms were risk factors for later LTFU. Patients who were admitted following HIV diagnosis at the ED were at a lesser risk for LTFU.

Understanding risk factors for LTFU on the moment of HIV infection diagnosis may help to develop focused approaches which can maximize retention in care.

References

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