Relative frequency and clinical characteristics of acute or recent hiv infections among new patients in 2010 in one treatment center in Belgium.

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Objectives

To estimate the relative frequency and the clinical and laboratory characteristics of acute and recent hiv infections among new patients in our treatment center.

Methods

Retrospective review of computerized medical data and charts of the new hiv positive patients registered in 2010.

Acute infections were defined as:

- laboratory confirmed seroconversion (LAB) (screening test reactive or not reactive, antigen positive and/or Line Immunoassay LIA-negative or indeterminate)
- or clinical symptoms compatible with seroconversion (CLIN) (and antibody positive)
- or recent infection (negative antibody test less than 6 months before, or no previous test available and history of seroconversion syndrome within 6m) (REC).

Results

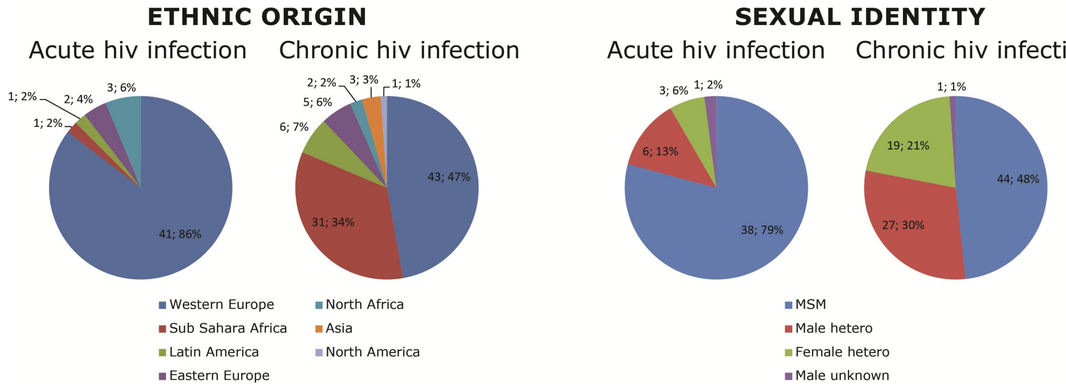
206 new hiv positive patients were seen at our center in 2010.

67 patients (33%) were already known hiv infections and were transferred in from elsewhere. They were excluded from the analysis.

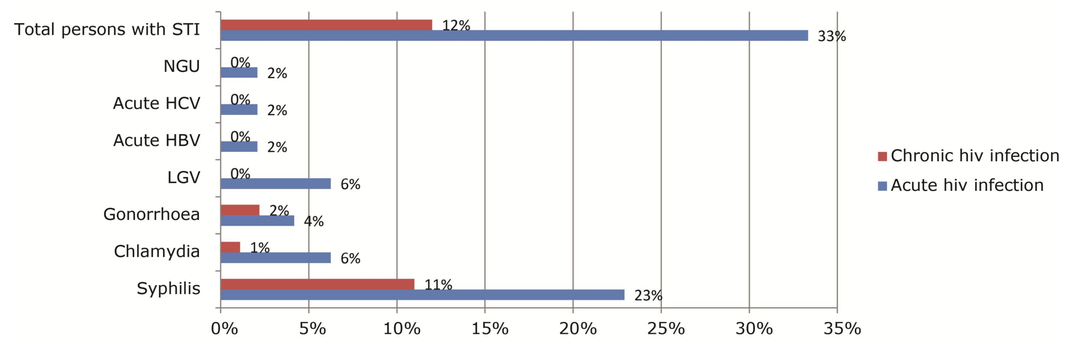
Out of the 139 true new patients, 48 had an acute or recent hiv infection (35%). Of these 14 (29%) were LAB, 23 (48%) CLIN and 11 (23%) REC. 91 persons had a chronic hiv infection.

	LAB	CLIN	REC	Chronic hiv	Total
clinical symptoms	10	23	0	14	47
high risk contact 2-8w before diagnosis	7	12	7	12	38
Last neg test <6m	6	5	4	0	15
gp120 negative	14	8	1	0	23
p31 negative	14	16	2	6	38
p17 negative	14	8	0	4	26

85% of the patients with an acute or recent infection were from Western-Europe, and 79% were MSM.



Patients with acute or recent infection had a higher rate of sexually transmitted diseases within three months before the diagnosis than patients with a chronic hiv infection (16 (33%) vs 11 (12%); p=0.006).



When compared to new patients with chronic infections, patients with CLIN and REC had more negative or indeterminate bands in LIA (gp120 [p<0.001], p31 [p<0.001], p17 [p=0.039]).
As CD8 cells often compensate for the decline in CD4 cells, there are more patients in acute infection with a high CD8 count. 44% of acute infections had CD8 cells ≥1500, compared to 16% in chronic infections (p<0.001).

42% of acute and recent hiv patients started antiretroviral treatment and the median CD4 count at initiation was 415 (IQR:344-567).

	Acute hiv infection	Chronic hiv infection
median first CD4 count (/mm³)	539	374
median first CD8 count (/mm³)	1277	916
CD8>=1500 (%)	44	16
Median VL (copies/ml)	306.000	75.900
Average VL (copies/ml)	2.192.997	203.369
Started treatment in 2010	20	52
No treatment start	28	39
median CD4 at start treatment (/mm³)	415	262

Conclusions:

In 2010, one third of the new hiv patients presenting for care can be categorized as acute or recent infection.

29% of them are recognized by laboratory seroconversion. Most people with acute or primary infection have distinct laboratory features (high viral load, negative bands on LIA and high CD8 count). Information on viral load, gp120/p31/p17 and CD8 count combined with clinical symptoms may help the clinician to identify the other two-thirds of patients with a recent infection. Although the place of treatment in acute hiv infection is not established, 42% of acute infections in our center are started on treatment.

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