PO3/10

Incidence and risk factors for medical care interruption in HIV-infected patients

A. Fournier[1], K. Champenois[1], E. Papot[1], E. Bouvet[2], R. Landman[2], R. Verdon[3], Y. Yazdanpanah[1]

[1]UMR 1137, Inserm, Université Paris Diderot, Paris, France, [2]Hôpital Bichat, AP-HP, Paris, France, [3]CHU de Caen, France

INTRODUCTION

- **Retention in care** is crucial to
  - reduce mortality of people who live with HIV
  - achieve the WHO target of 90% of viral suppression in HIV-treated patients by 2020.
- Now that HIV has become a chronic disease with lifelong treatment, the challenge is to maintain, enhance, and facilitate retention of HIV-infected patients in the care system.

Objectives

In a high income country, to

- estimate the incidence rate of **medical care interruption (MCI)**
- identify HIV-infected patients at risk of MCI in a high income country

METHODS

- We estimated the incidence rate of MCI in 4,796 individuals followed in a HIV clinical cohort in Paris (infectious diseases department, Bichat hospital) between January 2010 and May 2016.
- Patients enrolled were:
  - Aged ≥18
  - Seen at the clinic at least twice after HIV diagnosis between January 2010 and October 2014

MCI definition

Patients were considered in MCI if they did not attend for at least 18 months

- any care in or outside the clinic
- any medical encounter (specialist or general practitionner)
- any blood test
- regardless of whether or not they came back after interruption

We actively searched for any medical encounter by reaching their infectious diseases specialist or primary care physician.

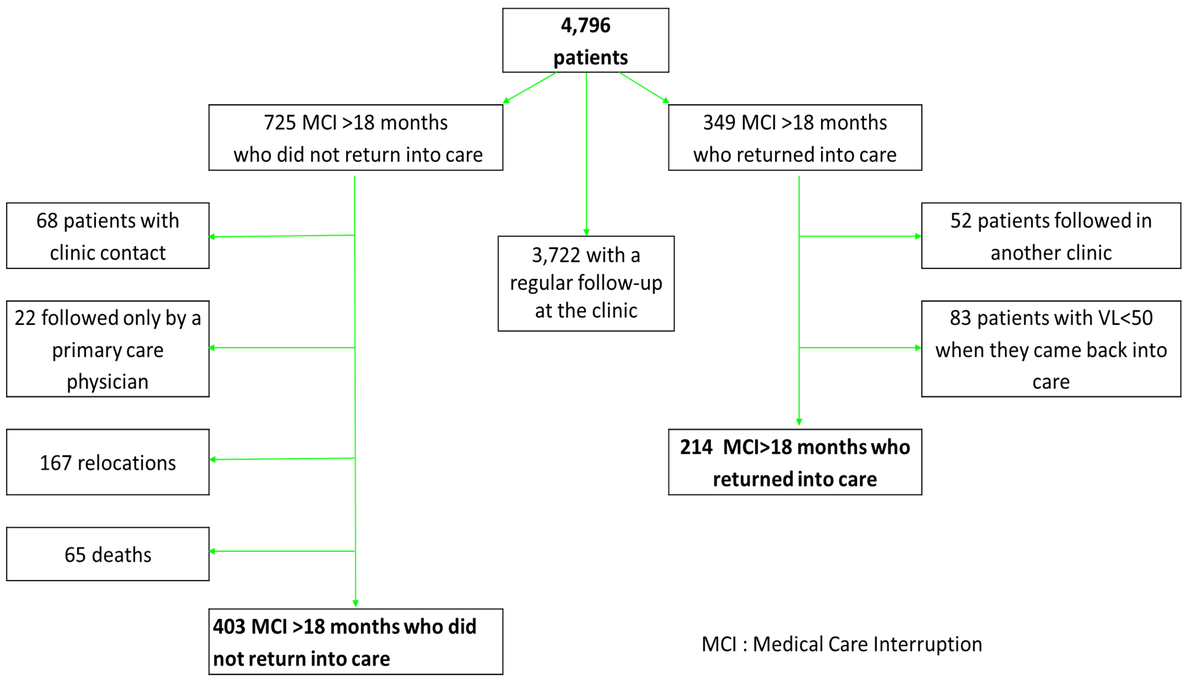
Statistical analysis

- We investigated sociodemographic, clinical and immuno-virological characteristics at HIV diagnosis and during follow-up collected prospectively through the Nadis software by physicians and other health care workers.
- Factors associated with MCI were assessed using a multivariate a Cox regression model

RESULTS

Number of patients with a MCI

Figure 1. Flow-chart



MCI : Medical Care Interruption

RESULTS

Incidence rate of MCI

2.5 per 100 persons-years (95% confidence interval = 2.3-2.7).

Independent risk factors for MCI

- At HIV diagnosis
  - a time period between HIV diagnosis and linkage to care >6 months
  - not having a primary care physician
  - Not being born in Sub-Saharan Africa
- During follow-up, the risk of MCI increased when
  - CD4 count was ≤350
  - The patient was not on antiretroviral therapy

Table 1. Independent factors associated with MCI at time of HIV diagnosis and during follow-up (Cox regression model)

Factors	MCI N=617	Regular follow-up N=4179	Hazard ratio (95% CI)	p-value
Fix variables				
Country of birth				
France	256 (14.0%)	1568 (86.0%)	1	
Sub-Saharan Africa	221 (11.5%)	1695 (88.5%)	0.75 (0.62-0.90)	0.002
Other countries	115 (11.7%)	868 (88.3%)	0.82 (0.66-1.03)	0.091
Primary care physician[a]				
Yes	283 (10.7%)	2359 (89.3%)	1	
No	334 (15.5%)	1820 (85.5%)	2.36 (2.00-2.79)	<0.001
Time period before first visit[b]				
≤ 6 months	368 (11.6%)	2797 (88.4%)	1	
> 6 months	249 (15.3%)	1382 (84.7%)	1.05 (1.02-1.08)	0.001
Time-dependant variables				
CD4-T cells count (/mm3)	NA	NA		
>500			1	
[351-500]			1.42 (0.97-2.10)	0.075
≤350			2.80 (1.98-4.00)	<0.001
ART[c]	NA	NA		
Yes			1	
No			3.63 (2.87-4.61)	<0.001

[a] Primary care physician declared by the patient, written in the computer file, whose consult letters from the clinic sent; [b]Time between HIV diagnosis and first medical visit in or outside the clinic; [c]Antiretroviral therapy (ART) received during the follow-up; NA: not applicable

DISCUSSION

- The incidence rate of MCI in this Northern country clinical cohort is lower than in other French or European studies. It may be explained by:
  - The time period with no medical encounters chosen to define MCI: 18 months vs. 12 months in other studies; 18 months being more in agreement with current follow-up schedule of HIV infected patients
  - Very active research of all care encounters not only visits in the infectious diseases department
  - A comprehensive care and social offer for HIV-infected patients already implemented in the center to improve retention in care.
- Surprisingly, patients born in Sub-Saharan Africa were less likely to had MCI. This may also explain by the comprehensive care and social offered in the setting and involvement of community NGOs.

Conclusion

Our findings may help clinicians to identify patients who are at risk of interrupting care and to initiate appropriate interventions earlier for HIV-infectious patients who are linked to care late, who are not linked to care outside the hospital, who are not migrant, who are immunocompromised during follow-up, who are not under ART or are under a first ART line.

Contacts: karen.champenois@gmail.com