DIFFERENCES IN ADHERENCE BEHAVIORS DEPENDING ON TIMING OF HIV ACQUISITION

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Population : all person living with HIV between 18 and 30 years old in 3 Québec centers CHUM[2], HCLM[3], CUSM[4]

Group 1: HIV diagnosed before 10 years old

Group 2: HIV diagnosed between 10 and 25 years old

Objectives: To compare adherence, resistance profile and eligibility for injectable cabotegravir-rilpivirine

Method

Retrospective chart review for :

- Treatment adherence according to physician
- Immunovirological control
- Resistance

Survey to evaluate:

- Self-reported adherence
- Causes of non-adherence
- Willingness to use an injectable regimen

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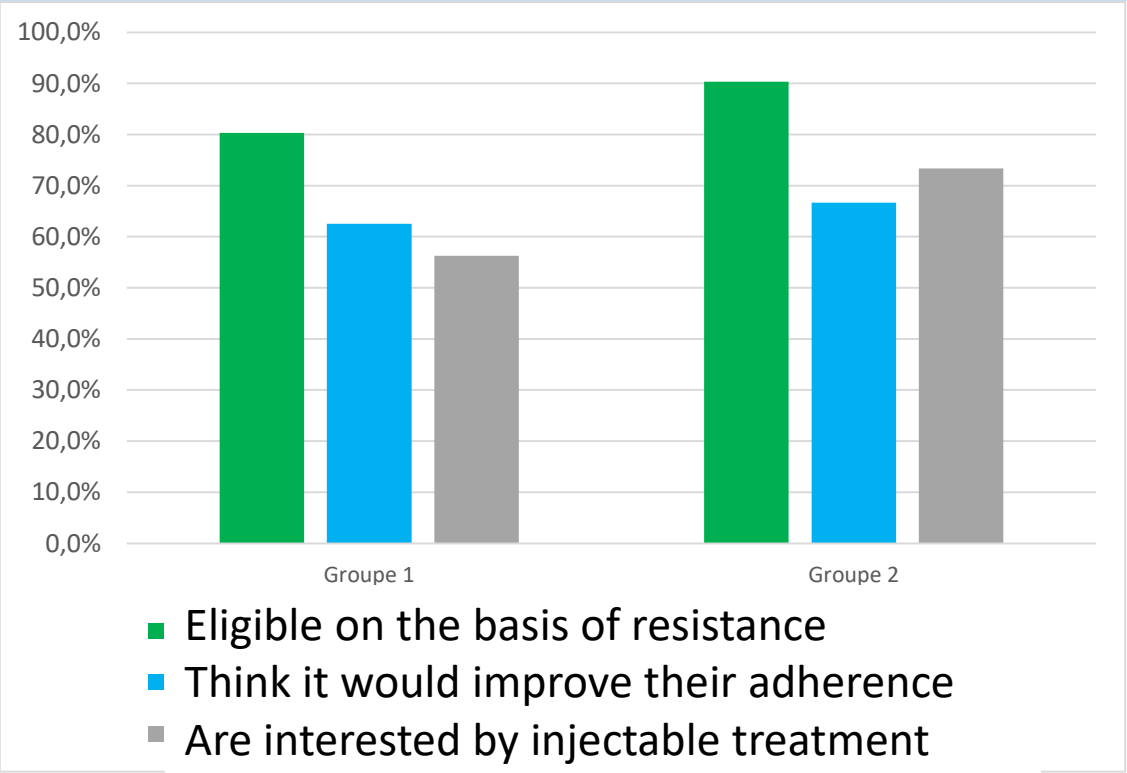
Results : retrospective chart review

	Dx before age 10 (n=66)	Dx between age 10 and 25 (n=62)
Transmission mode		
Perinatal	95,5%	0%
Sexual	0%	88,7%
Injection drug use (IDU)	0%	0%
Other, unknown	4,5%	11,3%
Regimen complexity		
One pill, once a day	66,7%	93,5%
More than one pill, once a day	27,3%	1,6%
Other regimens	6,1%	4,8%
Treatment adherence (according to the medical file)		
Optimal	37,9%	41,9%
Good	45,5%	48,4%
Poor, inadequate	16,7%	9,7%
Immunovirological efficacy		
Good immunological and virological efficacy (CD4 over 200, VL under 200)	78,8%	93,5%
Good immunological but poor virological efficacy	9,1%	6,5%
Good virological but poor immunological efficacy	3,0%	0,0%
Poor immunological and virological efficacy	9,1%	0,0%

Results: interest and eligibility for cabotegravir-rilpivirine

Resistance to each group of antiretroviral	Dx before age 10 (n=66)	Dx between age 10 and 25 (n=62)
NRTI Resistance	34,8%	1,6%
NNRTI Resistance (excluding rilpivirine)	28,8%	17,7%
PI Resistance	15,2%	3,2%
INSTI Resistance	6,1%	1,6%
Rilpivirine Resistance	15,2%	9,7%
Eligibility for cabotégravir + rilpivirine	80,3%	90,3%



- Significantly more ART classes impacted by resistance mutations in group 1 (0.89±1.10 vs. 0.29±0.69, p=0.002)
- On the basis of resistance, there is a trend for more eligible patients in group 2 (90.3% vs 80.3%, p=0.12)
- Patients in group 2 seemed to be more interested in the injectable treatment than patients in group 1 (73.3% vs. 56.3%, p=0.32)

Results: survey

Survey (Godin questionnaire * + added questions)	Dx before age 10 (n=16)	Dx between age 10 and 25 (n=15)
	Average	Average
Number of missed pills over 2 days	0,25	0,13
Number of missed pills over 7 days	0,56	0,20
Self-rated importance of antiretroviral treatment	9,66	9,57
	%	%
Perception of treatment as essential for health	93,8%	93,3%
Interference between social activities and adherence to antiretrovirals	12,5%	0,0%
Negative impact on quality of life	31,3%	20,0%
Interest in long-acting injectable antiretroviral treatment	56,3%	73,3%

Chart review and survey

- No statistically significant association between group and treatment adherence in both the chart review (83% vs. 90%; p=0.24) and the survey (0.56 ± 1.12 vs. 0.20 ± 0.40, p=0.13)
- Patients with poor or insufficient adherence to therapy were more at risk of poor or incomplete efficacy (aOR, 68.90; 95%CI [16.4-289.5])
- ART adherence was on average noted higher when it was self-assessed with the online questionnaire, compared to adherence according to the note in the medical file.

* Godin G, *et al.* ***Validation of a self-reported questionnaire assessing adherence to antiretroviral medication***. AIDS Patient Care STDS. 2003

Conclusion

- A desirability bias was perceived in the survey
- Despite similar adherence in both groups, the group infected from childhood:
  - has more HIV pharmacological resistance
  - achieves immunological and virological efficacy less often

- Even though many young patients may be interested in long acting injectable antivirals, it is important to consider previous genotypes to ensure eligibility.

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