

MEETING ABSTRACTS

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Risk of HIV-associated Hodgkin lymphoma during the first months after initiation of combination antiretroviral therapy

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Background

Since the advent of combination antiretroviral therapy (cART), several studies have described an increase in the incidence of Hodgkin lymphoma (HL). This increase has been postulated to be linked with immunologic mechanisms occurring at cART initiation. Relationships between the CD4 cell count and the risk of HL have also been investigated. Our study aimed to evaluate the risk of HL by use of cART and its duration.

Materials and methods

From the French Hospital Database on HIV (FHDH-ANRS CO4), a large prospective hospital cohort, we studied the incidence of HL in 1992-2007 according to the duration of cART exposure: no cART and year < 1996, no cART and year ≥ 1996, [0;1], [1;2], [2;3], [3;6] and ≥ 6

months. Relative rates (RR) of HL were estimated using Poisson regression models for the duration of cART exposure, adjusted for age, period of followup, sex and exposure group, migration from sub-Saharan Africa, AIDS stage, and CD4 cell count.

Results

Our study included 286,806 person-years (PY) of followup and 187 HL cases. The incidence of HL was not associated with the period: 0.79, 0.60, and 0.64 per 1000 PY before 1996, in 1996-1999, and since 2000, respectively (p=0.55). Risk of HL was significantly related to cART (p=0.008), being especially high during the first 3 months of use (Table 1). The association remained after adjustment for age, sex and exposure group, migration, and AIDS stage (p=0.006), but not in the model

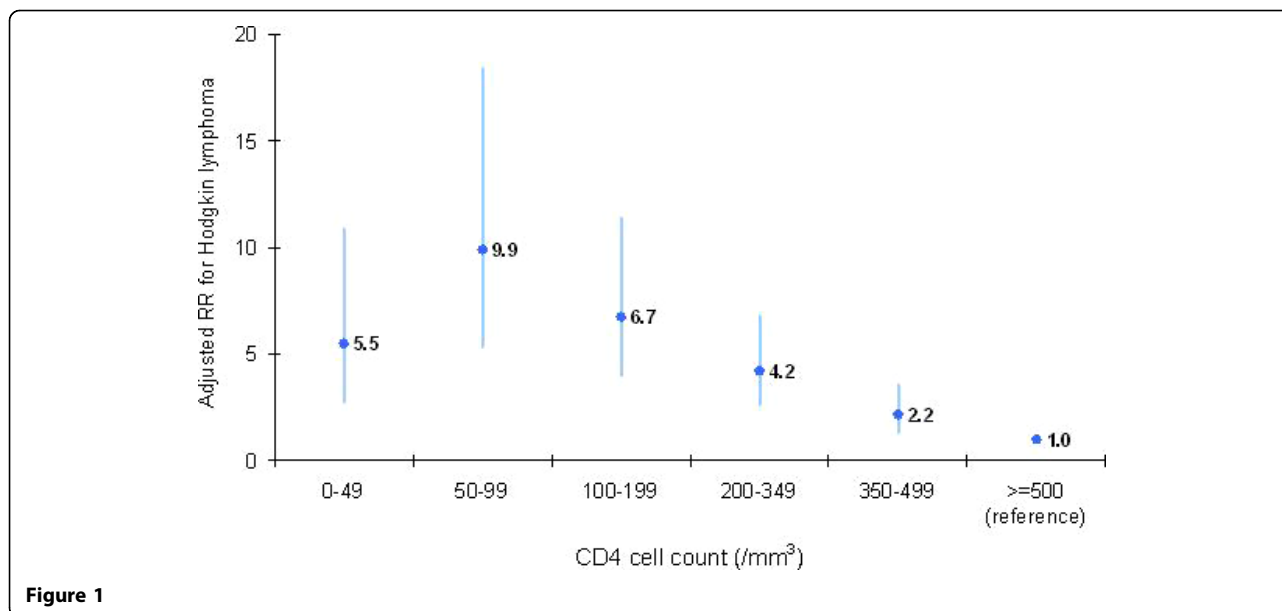
Table 1

	No of diagnoses	Incidence per 1000 PY	Crude RR 95%CI	Adjusted RR Model 1* 95%CI	Adjusted Model 2** 95%CI
no cART and year < 1996	43	0.58	1.35 [0.84;2.18]	1.14 [0.7;1.85]	0.68 [0.4;1.17]
no cART and year ≥ 1996	28	0.79	1	1	1
[0;1]	6	2.01	3.48 [1.48;8.17]	3.09 [1.31;7.28]	1.75 [0.73;4.19]
[1;2]	2	0.68	1.19 [0.29;4.89]	1.05 [0.25;4.33]	0.30 [0.04;2.23]
[2;3]	7	2.35	4.11 [1.85;9.13]	3.62 [1.62;8.08]	2.17 [0.96;4.92]
[3;6]	8	0.94	1.63 [0.76;3.46]	1.43 [0.67;3.05]	0.90 [0.41;1.94]
≥ 6	93	0.58	1.00 [0.69;1.43]	0.83 [0.57;1.2]	0.75 [0.51;1.10]

*adjusted for age, sex and exposure group, migration for sub-Saharan Africa, AIDS stage. **adjusted for variables in model 1 and CD4 cell count.

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accounting for CD4 cell count ($p=0.058$). A peak of HL incidence was observed for 50-99 CD4 cell count and the association between risk of HL and CD4 cell count remained significant in the multivariate model (Figure 1, $p<10^{-6}$).

Conclusion

Our results support that the early cART effect on the risk of HL is largely explained by CD4 count.

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