

INFECTIOUS COMPLICATIONS DURING PEG-IFN PLUS RIBAVIRIN IN HIV-INFECTED PATIENTS WITH CHRONIC HEPATITIS C (CHC)

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BACKGROUND

- Peg-IFN treatment has been associated with an increased risk for infectious complications in patients with chronic hepatitis C (CHC).
- In patients without HIV infection, the incidence of infection does not seem to be associated with neutropenia.
- We aimed to describe the rate of infectious events in HIV/HCV coinfecting patients during peg-INF plus ribavirin therapy, and study their possible association with neutropenia or low CD4+ cells.

PATIENTS AND METHODS

- Prospective cohort of 174 consecutive HIV/HCV coinfecting patients who started their first course of treatment with peg-IFN α -2a (53%) or peg-IFN α -2b (47%) plus weight-adjusted ribavirin, between January 2001 and March 2006.
- Monthly visits during the treatment period were performed. All adverse effects, including infectious complications, were systematically recorded.
- The frequency of infectious complications was compared between patients with or without neutropenia WHO grade 3 or 4 ($< 750/\text{mm}^3$) and with or without CD4+ cells below $200/\text{mm}^3$ by means of Chi square test

RESULTS

- During the study period almost half the population developed an infectious complication during therapy (117 infections in 84 patients, 48%).
- The median time to an infectious event was 12 weeks (IQR 8; 24).
- Grade 3-4 neutropenia was observed in 51 subjects (29%), but only in 2% led to peg-IFN dose reduction, and there were no treatment withdrawals. 30 of 51 patients received G-CSF (59%), with favourable response.
- The most frequent infectious complications were respiratory tract infections (31% of patients). Table 2.
- Patients with WHO grade 3 or 4 neutropenia or with CD4 counts below 200 cells/ml during therapy, did not have more frequency of infectious events.

Table 1: Patients' baseline characteristics

Patients' characteristics	N=174
Male (n, %)	136 (78)
Age-years (median, IQR)	41 (38; 44)
Prior IDU (n, %)	151 (87%)
Prior AIDS diagnosis (n, %)	48 (27)
Nadir CD4 count (median, IQR)	161 cells/mm ³ (71-286)
Nadir CD4 < 200 cells/mm ³ (n, %)	96 (55)
Baseline CD4 count (median, IQR)	510 cells/mm ³ (342-737)
Baseline CD4 < 200 cells/mm ³ (n, %)	10 (6)
Baseline RNA HIV < 1.7 log (n, %)	114 (66)
HCV genotype 1 (n, %)	80 (46)
Baseline RNA HCV (median)	700.000 UI/mL
Fibrosis F3-F4 (n, %)	59 (51%)
Antiretroviral therapy (n, %)	143 (82%)

Table 2: Infectious complications during peg-IFN plus ribavirin in HIV-infected patients with CHC

Infectious complications during treatment	N (%)
Respiratory tract infections	54 (31)
Herpes simplex virus	13 (7.5)
Dental and gingival infections	12 (7)
Oral candidiasis	8 (4.6)
Acute gastroenteritis	7 (4)

Table 3: Frequency of infectious complications according to the presence of neutropenia and low CD4 count

	%	p
Neutropenia vs. non neutropenia (%)	23 vs. 61	0.58
CD4 < 200 vs. CD4 > 200 cells/ml (%)	24 vs. 60	0.62

CONCLUSIONS

- Infectious complications, mainly respiratory tract infections, are frequent in HIV-infected patients with CHC on peg-INF plus ribavirin.
- Most of them occurred during the first months of treatment.
- Infection was not associated with neutropenia or low CD4 counts.