

P2308

Abstract (poster session)

Role of the CD4+ count monitoring during pegylated interferon therapy in chronic HCV infected patients

C. Popescu, V. Arama*, A. Hristea, V. Molagic, D. Munteanu, R. Mihailescu, I. Olaru, M. Radulescu, R. Moroti, R. Nastase, I. Niculescu, S. Gliga, G.A. Popescu (Bucharest, RO)

Even though hematological cytopenias are the most frequent adverse effects during interferon treatment, no data exist concerning the decrease of lymphocytes, especially CD4 +. Objectives: describing the variation in lymphocyte and CD4 count during interferon treatment in order to identify the need for opportunistic infections prophylaxis. Methods: prospective cohort study of patients receiving pegylated interferon. Lymphocyte counts, CD4+, CD8+, CD4/CD8 ratio were evaluated at baseline, and after 3, 6, 9 and 12 months of interferon. Results: 121 patients with HCV hepatitis have met the inclusion criteria. The lymphocyte counts decreased during treatment; the mean decrease was 1442.3/mm³. The mean value of CD4+ at baseline was 838.2/mm³ (SD: +/- 184.9, CI95%: 813.4; 898.9). The mean decrease of CD4 count vs baseline was: 342.32/mm³ at 3 months (SD: +/-201.32; CI95: 292.58; 372.27), 445.36/mm³ at 6 months (SD: 178.95; CI95%: 378.2; 484.4), 456.26/mm³ at 9 months (SD: 194.5; CI95%: 411.27; 514.33), 470.33/mm³ at 12 months (SD: 186.45; CI95%: 403.75; 538.19). No patient had at baseline a CD4+ count below 200/mm³. The number of patients with CD4+ below 200/mm³ significantly increased between visits (4.5% at 3months, 15.8% at 6 months, 21.9% at 9 months, 25.3% at 12 months) (p= 0.00004). The decrease of CD4+ count was correlated with the decrease of lymphocytes. The CD4/CD8 ratio also decreased during interferon treatment: the CD4/CD8 ratio below 1.5 was recorded in 8.32% of patients at baseline and 46.96% of patients at end of treatment (p=0.005). We also reported a patient who developed severe pneumonia during interferon therapy. The diagnosis was *Pneumocystis jirovecii* pneumonia. The CD4 level was 254/mm³ after 6 months and 210/mm³ after 9 months of treatment. In the last week of treatment when pneumonia was diagnosed the CD4 count was 98/mm³ and ratio CD4/CD8 was 0.8. Conclusions: The CD4+ count may decrease in some patients receiving interferon to levels that increase the risk of opportunistic infections. More important seems to be the ratio CD4/CD8. The monitoring of CD4 count in patients who developed lymphocytopenia is very important. Acknowledgement: This paper is supported by the Sectoral Operational Programme Human Resources Development (SOP HRD), financed from the European Social Fund and by the Romanian Government under the contract number POSDRU/89/1.5/S/64109