

ORAL PRESENTATION

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# Treatment of chronic HBV hepatitis – between immune control and virological control

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## Background

According to international guidelines, the treatment of HBV hepatitis can use both pegylated interferon (IFN) and nucleoside/nucleotide analogues with high genetic barrier (NNA). The main advantage of IFN based regimen is the possibility of immune control after a therapy with finite duration. The main advantage of NNA is the virological control during lifelong therapy. Objectives: To estimate the level of immune control after IFN therapy and the level of virological control during NNA.

## Methods

Retrospective analysis of HBV infected patients treated in Third Department of Matei Bals Institute, between 2008 and 2014: group 1 – patients who finished IFN therapy and group 2 – patients who received more than 6 months of NNA.

## Results

Of more than 1500 HBV infected patients monitored in our Department, 213 patients received antiviral therapy: 64 patients IFN and 149 patients, NNA. Fifty-six patients in group 1 and 129 patients from group 2 met the inclusion criteria. The demographic characteristics were: in group 1 mean age – 38.51 year-old and sex ratio M:F = 1.4:1 and in group 2 mean age – 47.32 and sex ratio M:F=2.2:1. The rate of immune control (defined as HBV viral load <2000 IU/mL) in group 1 was 41%, the mean duration of follow-up was 41.21 months. Thirty-two patients from group 1 had a viral load >2000 IU/mL during the

follow-up period and were subsequently treated with NNA after a mean period of 14.15 months. HBsAg loss was obtained in 6 patients (10.71%) and anti-HBs seroconversion in 3 patients (23.21%). Thirteen patients were HBeAg positive and 5 of them developed anti-HBe antibodies (38.46%). Other 2 patients had HBsAg negative at EOT but after 6 months, HBsAg was positive again. In group 2 the rate of virological control (defined as undetectable viral load) was 77.34%. In 3 cases virological failure was recorded. Of 29 patients without virological control, 24 had viral load >LLQ. The mean duration of NNA therapy was 32 months. Nineteen patients had HBeAg positive and in 5 cases (26.31%) anti-HBe seroconversion was obtained, after a mean period of 36.4 months. The mean duration until viral load was undetectable was 32 months. Only one patient registered HBsAg loss, without anti-HBs seroconversion (0.77%).

## Conclusion

After IFN therapy more than 40% patients obtained immune control. This rate could be higher if response guided therapy is used. During NNA therapy the rate of virological control is almost 80% but lifelong therapy is necessary.

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