

HEPATITIS B VIRUS AND HEPATITIS C VIRUS EPIDEMIOLOGY AMONG NEWLY DIAGNOSED NON-HODGKIN LYMPHOMA PATIENTS IN REAL WORLD ANALYSIS (NIHIL)



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Introduction:

- The prevalence of positive anti-HCV antibodies (anti-HCV+) in the Czech Republic was determined as 0.2% in 2001 and 1.67% in 2015
- The prevalence of HBsAg positivity (HBsAg+) was 0.56% in the Czech population in 2001, the prevalence of HBsAg+ according to another study in 2013 was only 0.06%

Aim:

- The aim of our study was to determine an existence of a relationship between hepatitis B, hepatitis C and lymphomas

Methods:

- The patient's population consisted of 9448 patients with newly diagnosed Non-Hodgkin lymphoma (NHL) from NiHiL project (NCT03199066) between years 2010-2018
- The diagnosis was based on the WHO classification of 2008
- The patient sample corresponds to 7923 (84%) patients tested for HBsAg in total and for anti-HCV antibodies to 7422 (78%) patients in total

Results:

- There were 54 patients HBsAg+ (0.7%) and 7869 patients HBsAg negative (HBsAg-) in the cohort of 7923 patients
- There were 53 patients anti-HCV+ (0.7%) and 7369 patients anti-HCV negative (anti-HCV-) in the cohort of 7422 patients

9448 patients with newly diagnosed NHL

7391 patients tested for HBsAg and anti-HCV

Only for HBsAg+

Only for anti-HCV

54 patients HBsAg+

53 patients anti-HCV+

Results:

Lymphoma subgroups:

- The main subgroups in the cohort of the patients tested for HBsAg and anti-HCV were diffuse large B-cell lymphoma (DLBCL) in 40%, follicular lymphoma (FL) in 20%, mantle cell lymphoma (MCL) in 9% and marginal zone lymphoma (MZL) in 10% and 9% respectively

Lymphoma subgroups	HBsAg- (n 7630)	HBsAg+ (n 52)	anti-HCV- (n 7156)	anti-HCV+ (n 53)
DLBCL	3144	22	2927	28
FL	1545	11	1485	7
MZL	751	7	688	6
MCL	694	1	665	6
B-NHL indolent	413	3	379	0
Peripheral T-lymphoma	379	0	351	4
B-NHL aggressive	252	3	236	1
B-NHL unspecified	236	4	223	1
T-NHL unspecified	216	1	202	0

Marginal zone lymphoma:

- In the group of patients with newly diagnosed MZL there were 0.9% HBsAg+ and 0.8% anti-HCV+
- Significant differences in clinical characteristics of anti-HCV- and anti-HCV+ patients with MZL were in sex (57% female and 100% female respectively, P<0.01)

The OS of patients with MZL HBsAg- vs. HBsAg+

p = 0.2998

The OS of patients with MZL anti-HCV- vs. anti-HCV+

p = 0.9912

OS = overall survival

The OS of patients with FL HBsAg- vs. HBsAg+

p = 0.3181

The OS of patients with FL anti-HCV- vs. anti-HCV+

p = 0.623

Diffuse large B-cell lymphoma

- In the cohort of patients with newly diagnosed DLBCL there were 0.7% HBsAg+ and 1.0% anti-HCV+
- Significant differences in clinical characteristics of patients HBsAg- vs. HBsAg+:
 - median age (66 years vs. 57 years, P<0.0004)
 - an enlargement of the spleen (16.3% vs. 54.6%, P<0.0001)
- Significant differences in clinical characteristics of patients anti-HCV- and anti-HCV+:
 - an enlargement of the spleen (16.5% vs. 37%, P<0.004)

The OS of patients with DLBCL HBsAg- vs. HBsAg+

p = 0.2313

The OS of patients with DLBCL anti-HCV- vs. anti-HCV+

p = 0.7193

Conclusion:

- There were no significant differences found in the overall survival or the progression free survival in patients with major subtypes of lymphoma anti-HCV- vs. anti-HCV+ nor HBsAg- vs. HBsAg+ patients.

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