NODULAR LYMPHOCYTE-PREDOMINANT HODGKIN LYMPHOMA (NLPHL) TREATMENT APPROACH DEPENDING ON TUMOR HISTOPATHOLOGIC GROWTH PATTERN

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Introduction

NLPHL is a rare indolent lymphoma with distinct pathologic and clinical features, characterized by variable morphology and histopathological growth patterns (HGP) of the tumor substrate.

Predictive factors have not been identified yet, and an individual approach is recommended to determine the treatment tactics.

Unfavorable prognostic value of a THRLBCL-like HGP and their predominance (>50% of the section area) in the tumor substrate for results of induction therapy has been demonstrated by our center earlier (Figure 1)

Aim

to develop of an optimal induction therapy protocol of NLPHL patients depending on tumor HGP

Methods

The results of therapy for **150 patients** with NLPHL treated in National research center for hematology from 2010 to 2023 were analyzed depending on the presence of THRLBCL- like pattern.

The group without THRLBCL-like pattern consisted of 87 (58%) patients: 33 (38%) had advanced-stage disease and 12 (14%) - extranodal involvement.

The group with the presence of THRLBCL-like pattern - 63 (42%),

of which the **predominance of THRLBCL-like sites** (> 50%) in the tumor substrate - in 32 (21%) patients.

55 (87%) had advanced-stage disease and 40 (64%) - extranodal involvement in the THRLBCL-like pattern group.

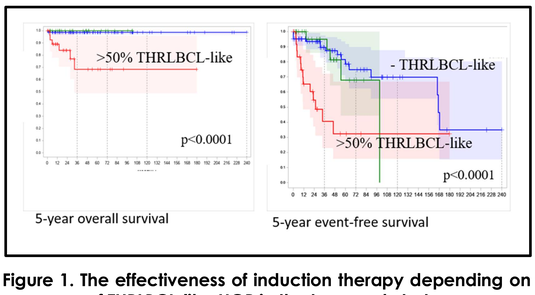


Figure 1. The effectiveness of induction therapy depending on the presence of THRLBCL-like HGP in the tumor substrate.

Results

In the group without THRLBCL-like HGP:

5-year event-free survival (EFS) and overall survival (OS) were 75% and 99%, respectively.

During the observation period, 60% of patients required chemotherapy, all achieved complete remission (CR), late relapses - 20%.

Given the indolent course, favorable prognosis, the goal of therapy in this group is to achieve long-term CR with minimal toxicity:

in case of local lesions - observation, radiation therapy;

generalized lesion – **RB or R-ABVD** is recommended depending on the volume of tumor lesion.

In the group with the presence of THRLBCL-like pattern (<50%):

5-year EFS and OS were 68% and 100%, respectively.

Given the aggressive course (87% of patients with advanced stages), EFS - 50% on R-CHOP- like regimens,

in order to achieve long-term CR and prevent early relapses and transformation, **6 R-BEACOPP-14** is recommended.

In the group with a predominance of THRLBCL-like pattern (>50%):

5-year EFS -32%, OS - 68%.

Given low efficiency of standard chemotherapy (R-BEACOPP-14 – EFS- 47%, R-CHOP- EFS- 15%), 60% early relapses,

a pilot protocol with nivolumab in the first line of therapy is proposed in this group (6 Nivo-R-BEACOPP-14).

Summary

The use of a differentiated approach to therapy based on the presence of THRLBCL-like pattern allows achieving maximum efficiency in an unfavorable group of patients and preserve hematopoietic reserves due to minimal impact without loss of efficiency in the group with a favorable prognosis