

The Importance of Immunoferrmental and Ultrasound Examinations in the Diagnosis and Estimation of Effective Treatment of Non-Hodgkin's Lymphomas in Children

Tengiz Zukhbaia, Alexander Chikvashvili, Nana Atuashvili

National Center of Oncology, Tbilisi, Georgia

Abstract

Lymph sarcoma represents the comprehensive problem in pediatric oncology. The results of treatment at the present time are much worse compared to other diseases. According to results of our study the tumor marker on NSE immunoferrmental analyses is the specific test for diagnoses and biological behavior monitoring of the disease. NSE expression is directly correlated with neoplastic changes in certain cases and the prognosis of progress of disease is possible according to its levels (alone with other data). The multicomponent chemotherapy is the method of choice among other special treatment modalities and only its conduction makes possible to depress the activity of disease. The high survival rate of lymph sarcoma could be reached in extranodal forms of disease.

Keywords: *limphosarcoma, tumor markers, neurospecific enolaza*

Introduction

Malignant lymphomas (ML) hold III-IV places in the structure of children's oncologic diseases. 50-55% [1,4] comes to non-Hodgkin's Lymphomas (NHL).

It is worth to note that super malignant blastic variants of NHL take place in children as well, which causes a high progressive rate, an unfavorable process and tend to diffusive development of the disease [2, 9].

The descriptive classifications of morphological structure and stages are disputable. At present the definition of stages of these diseases is made by the classification received from Ann Arbor. The morphological study is performed by the classification of Lukes - Collins [3,7,5,8,6].

In the etiology and pathogenesis of NHL great attention is paid to the violation of cellular and humoral immunity. The diagnosis of this pathology is rather difficult at early

stage. However, Ultrasonography gives possibility of it in majority of cases [2].

Coming from the strong aggressive character of NHL in children we aimed to perform immunoferrmental examinations for detecting possible markers associated with tumors (TM) among these patients.

Material and Methods

23 primary patients from 3 to 15 years with NHL were under our control. The most frequent age of the disease was from 3 to 6 years (47,8%). Boys are more often affected (70%). The verification of the disease is implemented in 2-3 weeks.

All patients were subjected to morphological examination (cytological - 19; histological - 6).

Lymphoblastic variant of NHL was diagnosed to 18 (78%) patients and the non lymphoblastic to 5 (21,8). The II clinical stage was detected in 3 patients, III - 18

References

1. Колыгин Б.А., Пунанов Ю.А. - Некоторые аспекты диагностики и лечения злокачественных лимфом у детей. //Тез. СПб: гор. онк. конф. "Злокачественные лимфомы. Диагностика, клиника, лечение," 1991,18-19.
2. Кошечкина Н.А. - Комплексная лучевая диагностика неходжкинских лимфом (лимфосаркомы) у детей. Российский онкологический журнал. 1998.18-21.
3. Малинин А.П., Кудинова М.С., Никонов А.А., Пунанов Ю.А. - Злокачественные неходжкинские лимфомы у детей: факторы прогноза и результаты лечения. вопросы онкологии, 1997, 43. 402-406.
4. Полянов В.Е., Ермаков Е.С., Кошечкина Н.А., Клиника - рентгенологические особенности поражения органов грудной полости при лимфогрануломатозе и лимфосаркоме у детей. //Российский онкологический журнал. 1998, 21-24
5. Amulon M.D , Link M.P Murphy S.B Malignant T-cell other Lymphomas. Cancer in children: clinical Management. Berlin: Spiringer- Verlag, 1986, p. 152-164
6. Lemerle J.M, Berard A., Patte C. Plo J.K Malignant Bcell Lymphoma in childhood. Cancer in children: clinical management. Ed A.P. Voute, A. Barrett Berlin: Springer-Verlag, 1986, p 49 -58.
7. Lukes RJ Collins R.D New approaches to the classification of the Lymphomata. Brit. J center, 1995 v. 31 Suppl 11.1-28.
8. Magrath I.T. Childhood Non-Hodgkin's Lymphoma. New directions in cancer Treatment. Ed. I Magrath-Sadney: Springer - Verlag, 1989, p 580-584
9. White L. Siegal S.E., Quah T.C. Non-Hodgkin's lymphoma in childhood. Patterns of disease and classification. Crig. Rev. Oncol. Hematol. 1992v13.01 55-71.

Значение иммуноферментных и ультрасонографических исследований в диагностике и оценке эффективности лечения неходжинских лимфом в детском возрасте

Тенгиз Зухбая, Александр Чиквашвили, Нана Атуашвили

Онкологический национальный центр, Тбилиси, Грузия

Р Е З Ю М Е

Одной из актуальных проблем детской онкологии является диагностика и лечение неходжинской лимфомы. Исходя из вышесказанного, во всех сомнительных случаях, в сочетании с другими методами исследования обязательным условием является определение в плазме больного концентрации нейронспецифической энолазы (NSE) в комплексе с методом ультразвуковой диагностики. Указанное сочетание двух методов необходимо включить в алгоритм исследования данной патологии.

Ключевые слова: лимфосаркома, маркер, нейронспецифическая энолаза, ультразвуковое исследование