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TITLE
Diagnosis of Hodgkin's lymphoma

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ABSTRACT

In 2015, almost three thousand of new cases of leukemias and lymphomas were reported and 1751 patients died from these cancers in the Czech Republic. Out of these, 277 cases (9 %) and 60 deaths (3.5 %) were related to Hodgkin's lymphoma (HL).

In Hodgkin's lymphoma the tumor cells comprise only a small minority of the involved tissue. Two distinct groups of HL are recognized: Classical Hodgkin's Lymphoma (CHL), further divided into four subtypes, and Nodular Lymphocyte–Predominant Hodgkin's Lymphoma (NLPHL).

CHL affects primarily cervical lymph nodes of young adults and may spread to other sites. The prognosis is very good with 80-90 % of patients being cured by radiotherapy and multiagent chemotherapy. However, these patients are at a significant risk of secondary malignancies.

NLPHL, which constitutes about 5 % of HL, affects primarily cervical and axillary lymph nodes of patients between 30 and 40 years of age. Usually, the progression is slow and the tumor shows excellent sensitivity to therapy.

When a suspicion of lymphoproliferative disease arises it is recommended to deliver the involved tissue to the pathology department in a native state. There are established guidelines for the processing of the excised material. The final products are represented by histological slides, which are then evaluated by a specialized pathologist.

A very important method in the diagnosis of tumors is immunohistochemistry (IHC) , a method based on the detection of antigens in situ by specific primary antibodies. Owing to this method, it is possible to diagnose a large number of cancers and to apply targeted therapy that can save the life of a patient, or at least prolong it by several years.

Key words: Hodgkin's Lymphoma, histological processing of tissue, immunohistochemistry