

51. R-CHOP TREATMENT OUTCOMES OF NON-HODGKIN'S LYMPHOMA IN A PATIENT WITH A GENERALIZED STAGE OF THE DISEASE

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Introduction. Aggressive non-Hodgkin's lymphomas are a group of lymphoid tissue neoplasms that originate from B- and T-cell precursors and mature B- and T-cells, and are often characterized by rapid growth, tumor mass-driven symptoms, or systemic effects of the malignant process. The cancer process develops quite rapidly, but about 62-65% of patients manage to go into long-term remission. However, almost half of these patients may show signs of disease progression or develop refractory symptoms after chemotherapy, where the vast majority of features are determined by the pathogenetic course of the disease. Therefore, early identification of non-responders to standard chemotherapy offers the possibility of adapting the treatment regimen, which could potentially improve the clinical course of the disease and reduce the toxic effects of ineffective and expensive chemotherapy. The introduction of Rituximab (R-CHOP) into anthracycline polychemotherapy regimens has made it possible to increase survival time for most CD20-positive patients.

Case presentation. A 67-year-old patient with the diagnosis of diffuse lymphoblastic lymphoma with involvement of cervical lymph nodes and progression in the mediastinum, hilar lymph nodes, and the inferior lobe of the left lung, stage IVB. The patient was presented with the following complaints: enlargement of the cervical lymph nodes, dry and heavy cough, dyspnoea, fatigue, headaches, and weight loss for approximately 10 kg in the last 5 months. History: The symptoms started about 3 months ago. The patient visited the family doctor and after a complete examination was directed to the Institute of Oncology for a proper diagnosis and treatment. The physical examination showed enlarged bilateral cervical lymph nodes with 4,0-5,0 cm in diameter. Harsh respiration at auscultation in the projection of the inferior lobe of the left lung. The CT examination showed an appearance of bilateral diffuse mediastinal and bronchopulmonary lymphadenopathy, bilateral insignificant pleural fluid effusion. CT signs of incipient perihilar interstitial pulmonary edema. A performed histopathology examination determined the following appearance: biopsy tissue fragments of a malignant tumor proliferation consisting of solid plaques of medium-sized cells with small cytoplasm and vesicular nuclei showing high mitotic activity and areas of necrosis. Immunohistochemistry showed a positive diffuse reaction in tumor cells to CD45, CD20, CD79a, CD19, moderate positive reaction to PAX5, a positive reaction in plasma cells to CD138 and MUM1, and negative reaction to Pancitokeratin, OCT2, TdT, and CD3.

Discussion. After the diagnosis has been histologically confirmed, the patient was admitted to the Hematology department of the Institute of Oncology for a specific treatment. The chemotherapy scheme which was administered to that patient was R-CHOP. This type of combined regimen (R-CHOP) is considered the most appropriate for that particular case. In total, the patient received 13 cycles of R-CHOP chemotherapy. Complete remission was installed after the 8th cycle of combined chemotherapy and was confirmed by cervical lymph node involution of about 95% from their initial size and the absence of mediastinal lymphadenopathy and pulmonary involvement radiological signs on a CT examination image. After the complete remissions were installed, the patient received 5 more cycles of R-CHOP for maintenance. By the date of the last examination, the duration of the complete remission consisted of 9,5 months.

Conclusion. As far as aggressive non-Hodgkin's lymphoma is considered a rapid progressive neoplasm, they also tend to respond rapidly to combined chemotherapy treatment with long-lasting remissions. Adding Rituximab to anthracycline regimens for the treatment of aggressive non-Hodgkin's lymphoma has truly changed the patient's outcome and disease evolution.