Treating Non-Hodgkin Lymphomas in Resource Limited Setting: 10 years of experience at the university hospital

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Abstract
Background: Non-Hodgkin lymphomas (NHL) are a heterogeneous group of lymphoproliferative malignancies which widely differ from each other by behavior and various responses to treatment. Recent decades made significant progress in the diagnosis and treatment of NHL in developed world, but the situation is different for the low and middle-income countries, and the data on this regard is limited.
Objective: The aim of the study is to describe distribution and treatment of various types of NHL in resource limited area and to estimate treatment outcomes.
Patients and methods: For this retrospective, hospital-based study we identified patients from our patients’ database with different types of primary diagnosed NHL who admitted and received treatment at the Clinic of Chemotherapy of “Muratsan” Hospital Complex of Yerevan State Medical University from 2008 to 2018. Overall 102 patients were identified and included in the study. 58 (57%) were males. In the entire group 26 (25.5%) were children (<18 years old) and 76 adults.
Results: In our cohort of patients’ majority had diffuse large B-cell lymphoma - 46 (45%). The main treatment approach used was chemotherapy ± radiotherapy. 72 (70.5%) patients completed planned chemotherapy cycles, 3 didn’t receive any treatment, and the rest 27 (26.5%) for different reasons didn’t complete the whole course of chemotherapy. Mean number of chemotherapy cycles was 5. The most often used chemotherapy regimen was CHOP/R-CHOP regimen among adults and NHL-BFM among children. From these 102 patients we have follow up information for 86 (84%). Median follow up time was 3 years (range 0.1 to 9.4). At the time of follow-up 23 patients are not alive (21 due to cancer progression and 2 for causes other then cancer), 63 are alive (54 with no relapse - from which 43 are in complete remission, 9 patients had disease recurrence).
Conclusion: To the best of our knowledge this is the first descriptive study on NHL conducted in Armenia. Although the study has limitations (small and heterogeneous group), it shows that the treatment outcomes of NHL did not significantly differ from that of higher income countries. Further and larger studies are needed.

Results: From 102 patients we have follow up information for 86 (84%). Median follow up time was 3 years (range 0.1 to 9.4). Only 72 completed planned chemotherapy cycles. At the time of follow-up 23 patients are not alive (21 due to cancer progression and 2 for causes other then cancer), 63 are alive (54 with no relapse - from which 43 are in complete remission, 9 patients had disease recurrence).

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