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ELEVENTH ANNUAL MEETING

Single-Center Experience Comparing the Clinicopathological Features and Prognosis of Primary and Secondary Splenic Involvement in Diffuse Large B-Cell Lymphoma (DLBCL) Patients

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INTRODUCTION

Primary splenic lymphoma (PSL) is a rare anatomical subtype of B-cell non-Hodgkin lymphoma (NHL) having an incidence of ~1% of NHL patients. There are no randomized clinical studies to guide treatment plans. Splenectomy has usually been the most preferred choice for evaluating malignant tumors localized to the spleen since it provides diagnostic and therapeutic advantages.

AIM

To evaluate the general characteristics of PS-DLBCL, prognostic factors for disease-free survival (DFS) and overall survival (OS), and therapeutic role of splenectomy in PS-DLBCL.

METHOD

A retrospective study of data collected from DLBCL patients diagnosed with either primary (36 patients) or secondary splenic involvement (232 patients) at Oncology Center, Mansoura University, Egypt, from January 2010 to December 2019. PSL was defined as lymphoma that primarily originated from and was limited to the spleen and the hilar lymph nodes without other site invasion. Splenic lymphoma was grossly classified into 4 subtypes: symmetrical splenomegaly without masses, miliary masses, scattered huge masses of about 3–11 cm and solitary large tumor. Patients were treated by rituximab + cyclophosphamide + doxorubicin + vincristine + prednisone.

RESULTS

In this study, PS-DLBCL was compared to those with secondary splenic involvement, and we observed borderline significance for older age among secondary splenic involvement (P=0.053). 50% of patients with PSL presented with a solitary large splenic mass vs. 19.4% of secondary splenic involvement (P≤.001). Regarding response to first-line treatment, there was no significant difference between the two studied groups (P=0.135). The median DFS for the studied patients was 31.17 months. In multivariate analysis, high International Prognostic Index (P=.029) and secondary splenic involvement (P=.043) were significant predictors of relapse. The median OS for the studied patients was 26.7 months. In multivariate analysis, response to treatment was a significant predictor of morality (P=.012 for stable disease, P=.002 for progressive disease). In a subanalysis of the study group, patients with PSL, splenectomy was not a significant predictor of OS (P=.822) or DFS (P=.797).

Overall mortality and relapse predictors in splenic lymphoma patients

	Overall mortality predictors in splenic lymphoma patients			Overall relapse predictors in splenic lymphoma patients		
Independent predictors	Multivariable			Multivariable		
	P	HR	95 % CI	P	HR	95% CI
HB	0.994	0.998	0.947-1.041	0.377	0.941	0.822-1.077
Platelets	0.066	0.994	0.987-1.001			
Albumin	0.762	0.884	0.399-1.962	0.097	0.728	0.500-1.059
LDH	0.087	1.001	0.998-1.002			
ESR	0.536	1.012	0.977-1.023			
IPI Low-intermediate Intermediate-high High	 0.933 0.166	 1.105 5.716	 0.107-11.427 0.484-67.485	 0.803 0.319 0.029	 1.109 1.555 2.971	 0.493-2.954 0.652-3.707 1.116-7.909
Spleen involvement 2ry				0.043	3.176	1.125-11.219
Response PR SD PD	 0.696 0.012 0.002	 1.578 14.412 12.870	 0.837-8.970 1.804-115.12 2.526-65.57			

CONCLUSIONS

Outcome of PSL was better than secondary splenic lymphoma. Moreover, splenectomy did not improve DFS or OS in PSL patients. Larger prospective studies may be needed.

REFERENCES

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