Outcomes of patients with splenic marginal zone lymphoma treated with rituximab or splenectomy: Report from tertiary cancer center in India

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Background

- ★ Splenic marginal zone lymphoma (SMZL) is a rare subtype of low-grade non-Hodgkin lymphoma with peculiar clinical presentation and indolent course.
- ★ Splenectomy has been traditional initial therapy while single-agent rituximab has emerged as an attractive option especially useful for these often elderly patients with comorbidities.
- ★ There has been no prospective study comparing these two treatment approaches given the rarity of the disease.
- ★ While the outcomes after splenectomy have been reported with long term follow up, institutional experience, patients fitness for surgery, extent of disease and possible peri-operative morbidity and mortality needs to be considered on case to case basis.
- ★ Single agent rituximab offers advantage in term of ease of administration and minimal treatment related toxicity with systemic anti-lymphoma effect.
- ★ Rarity of SMZL, makes prospective comparative trials difficult comparing thses two therapeutic modality.
- ★ We analyzed our patients’ baseline characteristics and outcomes with two treatment.

Method

- ★ We did a medical record review of all patients diagnosed with SMZL at our hospital between January 2008 and December 2016.
- ★ Baseline and treatment characteristics were collected and outcomes were analyzed.
- ★ Progression-free and overall survivals were calculated by Kaplan Meier methods and were compared by log rank test.
- ★ A total of 53 patients were treated during this period.
- ★ Median follow up period for whole cohort was 5.1 years.
- ★ We analyzed the impact of age, FIL risk group, beta-2 microglobulin, B symptoms, therapy received, response to treatment, and other baseline hematologic parameters (hemoglobin, TLC, and platelet count) on outcomes.

Results

- ★ Thirty eight patients were treated with splenectomy, 10 received single-agent weekly rituximab for 6 weeks while 5 patients (with lymphadenopathy outside splenic hilum) were treated with Bendamustin-rituximab for 6 cycles.
- ★ Thirty-five patients (66%) were male and median age at diagnosis was 63 years (range 24 to 87 years).
- ★ Median hemoglobin at presentation was 10 gm/dL (range 2.6 to 15.1 gm/dL), total leukocyte count was $8.8 \times 10^9/L$ (range 1.9 to $280 \times 10^9/L$), and platelet count was $102 \times 10^9/dL$ (range 17 to $677 \times 10^9/dL$).
- ★ As per the FIL prognostic score, 5 (9.4%), 9 (17%), and 29 (54.7 %) were in low- , intermediate- , and high-risk groups respectively.
- ★ One patient was positive for both HCV and HBV while another one was HBV positive.
- ★ Response assessment showed 41 patients achieved CR, PR in 6 patients, progressive disease in 1 patient, and response evaluation could not be done in remaining 5 patients.
- ★ Twelve patients have relapsed, 9 in splenectomy and 3 in chemotherapy group.

Over all and progression free survival

- ★ There was no difference in PFS and OS in groups who have undergone splenectomy versus rituximab with or without chemotherapy.

- ★ The 5-year PFS and OS of whole cohort was 67% and 78%, respectively.

Outcomes

- ★ Nine patients have died, 7 in splenectomy group and 2 in chemotherapy group.
- ★ The cause of death was progressive disease in 4 patients (2 each in group), 2 due to treatment toxicity (1 each post-splenectomy and after combination chemotherapy with BR, and 3 of unrelated causes (all in splenectomy group).
- ★ In this retrospective analysis, advanced age, lower baseline hemoglobin, and high FIL score predicted poor OS, while the rest of the parameters were found to be nonproductive of outcomes.

Conclusion

- ★ Rituximab offers comparable outcomes to splenectomy in patients with SMZL.
- ★ Advanced age, Low hemoglobin and high FIL score predicts poor survival in our study cohort.

“There are not relevant conflicts of interest to disclose.”