



Prognostic Value of Systemic Inflammatory Markers in Gastric MALT Lymphoma



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BACKGROUND

- ❖ Several studies have shown the role of inflammatory markers, especially the neutrophil-to-lymphocyte Ratio (NLR), as indicators of poor prognosis in various gastrointestinal malignancies.
- ❖ We aimed to examine the prognostic value of NLR, among other markers, and their relationship with the presence of baseline distant metastasis in patients with MALT Lymphoma.

METHODS

- ❖ We retrospectively reviewed the charts of 139 patients with Gastric MALT Lymphoma treated at a tertiary care cancer center from 2012 to 2018.
- ❖ We examined the relationship between absolute eosinophilic count (AEC), absolute lymphocyte count (ALC), absolute monocyte count (AMC), absolute neutrophil count (ANC), monocyte to lymphocyte ratio (MLR), NLR, and platelet to lymphocyte ratio (PLR) with the presence distant metastases, and overall survival (OS).
- ❖ We used multivariable logistic regression analyses to test the association between the variables and the presence of baseline distant metastases.

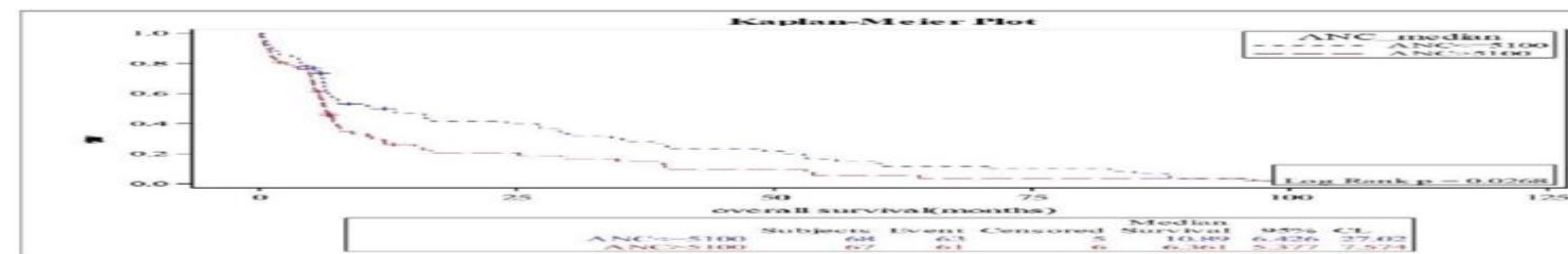


Figure 1

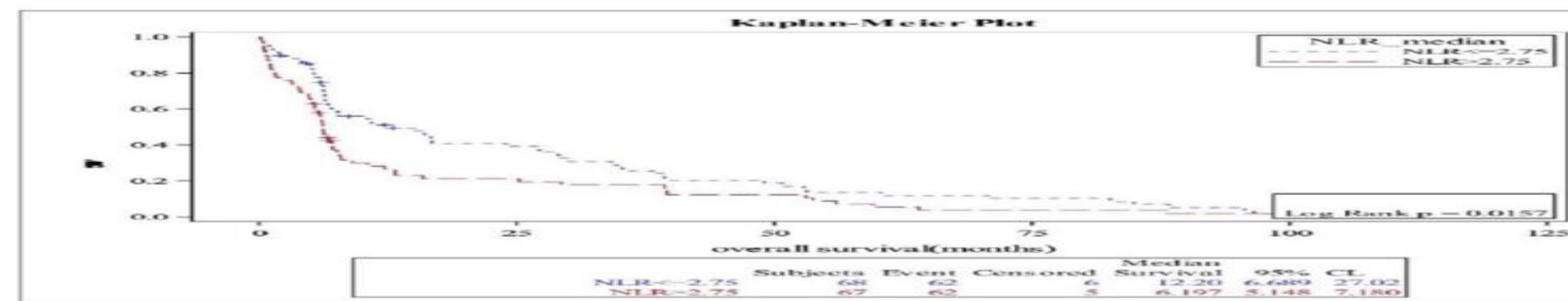


Figure 2

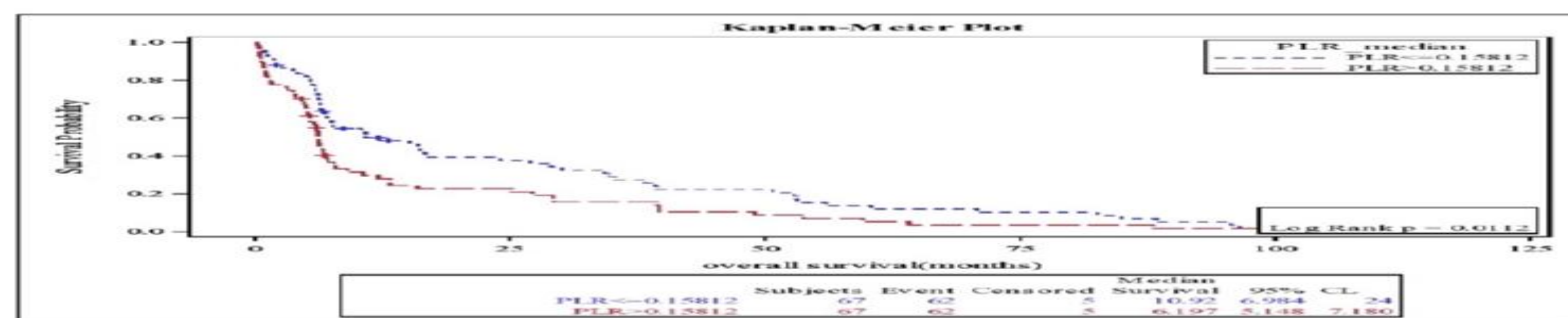


Figure 3

Figure 1. Kaplan Meier curve for overall survival of patients with ANC
Figure 2. Kaplan Meier curve for overall survival of patients with NLR
Figure 3. Kaplan Meier curve for overall survival of patients with PLR

DISCUSSION

- ❖ High systemic inflammatory markers are associated with poor prognosis (the presence of distant metastasis) and poor OS in patients with Gastric MALT Lymphoma.
- ❖ To our knowledge, this is the first study examining the association between these inflammatory markers and the presence of distant metastases in MALT Lymphoma. Whether these markers could predict the response to treatment is unknown.

RESULTS

- ❖ The median age was 55 years, and males comprised 67.6% of the patients. The ROC value of 3.4 was determined as the cutoff value for NLR. High NLR (NLR > 3.4 μ L) was significantly associated with the presence of distant metastasis at diagnosis (p-value, 0.02, Odds Ratio (OR): 2.4, CI: 1.14- 5.10).
- ❖ High ALC (>1819) was also associated with the presence of baseline distant metastasis (p-value, 0.04, OR: 0.46, CI: 0.22- 0.98).
- ❖ Multivariable analysis showed that high NLR was an independent risk factor for distant metastasis at presentation (p-value, 0.02, OR 2.4 95% CI 1.1-5.1).
- ❖ High ANC, NLR, and PLR, were associated with poor OS, (p-value, 0.027, 0.016, and 0.011 respectively).

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