P – 082 Prognostic significance of positive lymph node ratio in patients with pN3 gastric cancer who underwent curative gastrectomy

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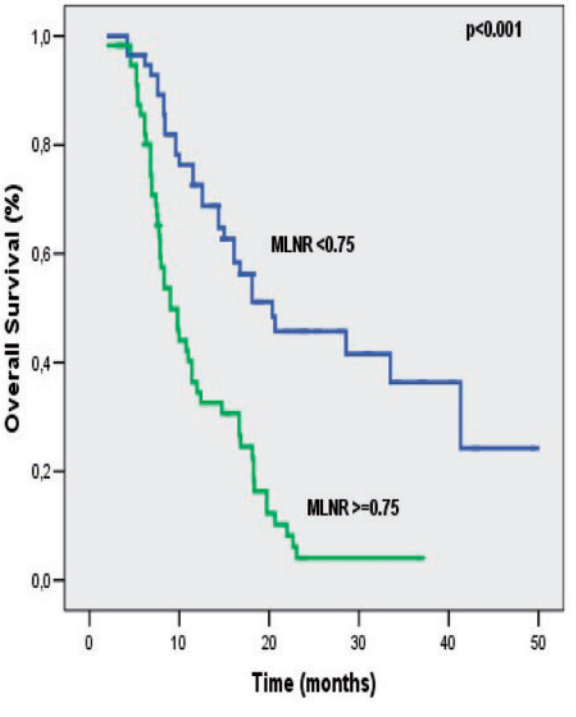
Introduction: Lymph node metastasis is an important prognostic factor for patients with gastric cancer. The aim of this study was to determine the prognostic significance of metastatic lymph node ratio (MLNR) in pN3 gastric cancer.

Methods: We retrospectively analyzed 116 patients with pN3 gastric cancer who had undergone radical gastrectomy with regional lymph nodes dissection. The prognostic factors and MLNR were evaluated by univariate and multivariate analysis.

Results: A MLNR of 0.75 was found to be the best cut-off value to determine the prognosis of patients with pN3 gastric cancer ($p = 0.001$). The MLNR was significantly higher in patients with gastric tumors with advanced p Tstage, large tumor size undifferentiated histology and perineural invasion. Univariate analysis showed that MLNR (<0.75 vs. >0.75) (Fig 1.), pN stage (N3a vs. N3b), tumor size, pT stage and perineural invasion were prognostic factors for overall survival (OS). The multivariate analysis indicated that both MLNR [HR: 5.53 (95% CI: 1.42-8.5), $p < 0.001$] and pN stage (N3a vs. N3b) [HR: 3.9 (95% CI: 1.1-5.3), $p = 0.02$] were an independent prognostic indicators, as was pT stage (T4 vs. T1-3) for OS. There was significant difference with respect to the recurrence patterns between MLNR groups. Lymph node and peritoneum recurrences were significantly more frequent in patients with MLNR >0.75 compared to the MLNR <0.75 group ($p = 0.005$). However, recurrence patterns were similar between pN3a and pN3b ($p = 0.92$).

Conclusion: Our results showed that MLNR was a useful indicator to determine the prognosis and recurrence patterns of patients with radically resected gastric cancer. Moreover, MLNR is beneficial and reliable technique evaluating lymph node metastasis.


p<0.001
MLNR <0.75
MLNR >=0.75
Overall Survival (%)
1,0
0,8
0,6
0,4
0,2
0,0
0
10
20
30
40
50
Time (months)

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