

PROGNOSTIC SIGNIFICANCE OF INFERIOR MESENTERIC ARTERY LYMPH NODE METASTASIS IN STAGE III SIGMOID AND RECTAL CANCER PATIENTS AFTER CURATIVE RESECTION



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Background

It is well known that lymph node metastasis is the most important prognostic factors of survival in colorectal cancer. Clinically, inferior mesenteric artery lymph node metastasis (IMALN) was regarded as one of the possible indicator of systemic dissemination. But, due to the low incidence rate, the studies focusing on this issue are very limited.

Purpose

We decided to evaluate the clinical impact of IMALN metastasis after curative resection in sigmoid and rectal cancer.

Methods

The authors reviewed clinicopathologic features, recurrence pattern, and long term oncologic outcomes of total 625, stage III patients, who had received curative resection for the treatment of sigmoid and rectal cancer. And the patients were divided into 33 IMALN (+) group and 592 IMALN (-) group according to lymph node metastasis status in IMA.

Results and Conclusions

After curative resection, the systemic recurrence rate were 51.5% in IMALN (+) and 25.0% in IMALN(-) ($p = 0.001$). IMALN metastasis, tumor location, positive lymph node numbers were identified as prognostic factors of systemic recurrence by univariate and multivariate analysis. Para-aortic nodal recurrence rate were 12.1% in IMALN(+) and 0.7% in IMALN(-) ($p < 0.001$) and IMALN metastasis was the only prognostic factors associated with para-aortic nodal recurrence in multivariate analysis. 5-year overall survival rate were 32.6% and 71.3% in IMALN (+) and (-) group respectively ($p < 0.001$). Cox regression analysis revealed that age, IMALN metastasis, tumor location, positive lymph node numbers, tumor size, adjuvant treatment were independently associated with overall survival. IMALN metastasis is strongly associated with systemic recurrence, and the only indicator of para-aortic nodal recurrence. Overall survival was very poor in IMALN (+) group compared to IMALN (-) group. So, close follow up with focusing on para-aortic nodal recurrence is mandatory in IMALN (+) patients after curative resection in stage III sigmoid and rectal cancer patients.