

ANSWERING REVIEWERS



November 9, 2013

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 5002-review.doc).

Title: Prognostic value of examined lymph node count in patients with node-negative gastric cancer

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The manuscript has been improved according to the suggestions of reviewers:

1 Format has been updated

2 Revision has been made according to the suggestions of the reviewer

(1) The definition of node-negative gastric cancer is unclear in this study. The authors enrolled the patients who the number of dissected lymph nodes is less than ten. Especially, the survival of patients, who the number of lymph node dissection was less than 3, was worse than others. The enrollment of these patients as node-negative gastric cancer patient confuses the results of this study. Usually, the number of dissected lymph nodes is more than 10 at least in the gastrectomy for the gastric cancer. Also, immunostaining or molecular examination for node-negative gastric cancer should be performed.

In this study, we designate node-negative gastric cancer as any gastric cancer with all examined lymph node (eLNs) negative, regardless of the total number of eLNs. However, how many nodes should be removed and examined when performing a radical gastrectomy for node-negative gastric cancer is still controversial. Available literature was identified more than 10 eLNs at least for N0 disease. This study was designed to elucidate the potential impact of eLNs on long-term survival of node-negative gastric cancer patients after curative surgery, and furthermore identify the least eLNs for N0 disease. In order to identify the most appropriate cut-point number of eLNs we enrolled the patients who the number of eLNs was less than ten. Based on our results, patients with > 15 eLNs had better prognosis than those with ≤ 15 eLNs in T2-T4 stages. Patients with ≤ 15 eLNs should be divided into 3 groups as 1-3eLNs, 4-10eLNs, and 11-15eLNs for acquisition of significant statistical differences among the subgroups of patients in T2-T4 stages. So we suggest that over 15 lymph nodes should be examined to improve the long-term outcome of node-negative gastric cancer patients following curative gastrectomy. Our study is retrospective, all enrolled patients was between January 2000 and December 2008, immunostaining or molecular examination for the whole specimen is unconventional at that time, so most patients with eLNs less than ten were not accepted immunostaining or molecular examination. Now immunostaining and molecular examination is conventional in department of pathology of our center.

(2) The distribution of dissected lymph nodes is unclear. According to tumor site, the areas of dissected lymph nodes are different among patients with node-negative gastric cancer.

The extent of lymphadenectomy is associated with primary tumor site. According to Japanese gastric cancer treatment guidelines 2010 the areas of dissected lymph nodes are as follows:

Type of gastrectomy	Limited lymphadenectomy	Extended lymphadenectomy
Proximate gastrectomy	1, 2, 3a, 4sa, 4sb, 7	1, 2, 3a, 4sa, 4sb, 7, 8a, 9, 11p

Total gastrectomy	1-7	1-7+8a, 9, 10, 11p, 11d, 12a
Distal gastrectomy	1, 3, 4sb, 4d, 5, 6, 7	1, 3, 4sb, 4d, 5, 6, 7, 8a, 9, 11p, 12a

All extent of lymphadenectomy was performed according to Japanese gastric cancer treatment guidelines. It is difficult to represent the distribution of dissected lymph nodes using statistical method because there are too many variables. So we just represent several variables like tumor location, type of gastrectomy, extent of lymphadenectomy, and extent of examined lymph nodes in table 2.

(3) Sentinel node concept is not discussed in the Discussion.

Sentinel node concept has been discussed in the DISCUSSION Paragraph 4 line 1-12.

(4) Recurrent sites are unclear, lymph node metastasis, hematogenous metastasis or disseminated recurrence?

The recurrent sites were shown in RESULTS *Recurrent sites of node-negative gastric cancer* and Table 5.

(5) The method of examination of the dissected lymph nodes was not described in this study. Was the histological examination of only center section in the lymph node performed?

Dissected lymph nodes were fixed in 10% formalin embedded in paraffin, and stained with hematoxylin-eosin. Each lymph node was re-examined microscopically and the status was determined by experienced pathologists. Histological examination of only center section was performed in the lymph nodes. (RESULTS *Surgical treatment and pathological examination* line 9-13.)

3 References and typesetting were corrected

Thank you again for publishing our manuscript in the *World Journal of Gastroenterology*.

Sincerely yours,



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