



## PEER-REVIEW REPORT

**Name of journal:** *World Journal of Gastrointestinal Surgery*

**Manuscript NO:** 73067

**Title:** How to examine the anastomotic integrity intraoperatively in totally laparoscopic radical gastrectomy? methylene blue testing prevents technical defect-related anastomotic leaks

**Provenance and peer review:** Unsolicited Manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer's code:** 02534290

**Position:** Editorial Board

**Academic degree:** MD, MSc, PhD

**Professional title:** Doctor, Professor, Surgeon, Surgical Oncologist

**Reviewer's Country/Territory:** Romania

**Author's Country/Territory:** China

**Manuscript submission date:** 2021-11-11

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2021-11-18 04:37

**Reviewer performed review:** 2021-11-27 11:44

**Review time:** 9 Days and 7 Hours

<b>Scientific quality</b>	<input checked="" type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
<b>Language quality</b>	<input checked="" type="checkbox"/> Grade A: Priority publishing <input type="checkbox"/> Grade B: Minor language polishing <input type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
<b>Conclusion</b>	<input checked="" type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input type="checkbox"/> Major revision <input type="checkbox"/> Rejection



**Baishideng  
Publishing  
Group**

7041 Koll Center Parkway, Suite  
160, Pleasanton, CA 94566, USA  
**Telephone:** +1-925-399-1568  
**E-mail:** bpgoffice@wjgnet.com  
**https://**www.wjgnet.com

<b>Re-review</b>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<b>Peer-reviewer statements</b>	Peer-Review: <input type="checkbox"/> Anonymous <input checked="" type="checkbox"/> Onymous Conflicts-of-Interest: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

### **SPECIFIC COMMENTS TO AUTHORS**

The overall quality of the manuscript is good, and the article should be accepted for publishing with high priority.



## PEER-REVIEW REPORT

**Name of journal:** *World Journal of Gastrointestinal Surgery*

**Manuscript NO:** 73067

**Title:** How to examine the anastomotic integrity intraoperatively in totally laparoscopic radical gastrectomy? methylene blue testing prevents technical defect-related anastomotic leaks

**Provenance and peer review:** Unsolicited Manuscript; Externally peer reviewed

**Peer-review model:** Single blind

**Reviewer's code:** 05408322

**Position:** Peer Reviewer

**Academic degree:** MD

**Professional title:** N/A

**Reviewer's Country/Territory:** Netherlands

**Author's Country/Territory:** China

**Manuscript submission date:** 2021-11-11

**Reviewer chosen by:** AI Technique

**Reviewer accepted review:** 2021-11-24 11:47

**Reviewer performed review:** 2021-11-30 22:28

**Review time:** 6 Days and 10 Hours

<b>Scientific quality</b>	<input type="checkbox"/> Grade A: Excellent <input type="checkbox"/> Grade B: Very good <input checked="" type="checkbox"/> Grade C: Good <input type="checkbox"/> Grade D: Fair <input type="checkbox"/> Grade E: Do not publish
<b>Language quality</b>	<input type="checkbox"/> Grade A: Priority publishing <input type="checkbox"/> Grade B: Minor language polishing <input checked="" type="checkbox"/> Grade C: A great deal of language polishing <input type="checkbox"/> Grade D: Rejection
<b>Conclusion</b>	<input type="checkbox"/> Accept (High priority) <input type="checkbox"/> Accept (General priority) <input type="checkbox"/> Minor revision <input checked="" type="checkbox"/> Major revision <input type="checkbox"/> Rejection



<b>Re-review</b>	[ <input checked="" type="checkbox"/> ] Yes [ <input type="checkbox"/> ] No
<b>Peer-reviewer statements</b>	Peer-Review: [ <input checked="" type="checkbox"/> ] Anonymous [ <input type="checkbox"/> ] Onymous Conflicts-of-Interest: [ <input type="checkbox"/> ] Yes [ <input checked="" type="checkbox"/> ] No

### **SPECIFIC COMMENTS TO AUTHORS**

Manuscript ID: 73067 How to examine the anastomotic integrity intraoperatively in totally laparoscopic radical gastrectomy? methylene blue testing prevents technical defect-related anastomotic leaks Summary: This is a manuscript that aims to investigate whether intraoperative methylene blue administration is a suitable test to evaluate the anastomotic integrity of esophagojejunostomy or gastrojejunostomy after total laparoscopic radical gastrectomy, and to investigate what the effect of intraoperative methylene blue testing (IMBT) is on the incidence of postoperative anastomotic leakage (AL). In addition, they aim to identify risk factors for positive IMBT and for developing AL. To achieve this, a retrospective study is conducted between January 2017 and December 2019. A total of 513 patients underwent totally laparoscopic radical gastrectomy because of gastric cancer or adenocarcinoma of the gastroesophageal junction. From these patients, 211 received IMBT and 302 did not receive IMBT. Seven patients had a positive IMBT, which required additional sutures. None of these patients developed AL. Fifteen patients did develop AL, two in the IMBT group and 13 in the control group. Risk factors for a positive intraoperative IMBT after univariate analysis were surgeons who performed <50 totally laparoscopic radical gastrectomies, operation time >4 hours, neoadjuvant chemotherapy and BMI >25 kg/m<sup>2</sup>. After multivariate analysis, BMI, operation time and insufficient surgical experience were identified as independent risk factors for positive intraoperative IMBT. Patients with preoperative BMI >25kg/m<sup>2</sup>, who experienced preoperative complications, received neoadjuvant chemotherapy and who underwent a totally laparoscopic total gastrectomy had a higher



**Baishideng  
Publishing  
Group**

7041 Koll Center Parkway, Suite  
160, Pleasanton, CA 94566, USA  
**Telephone:** +1-925-399-1568  
**E-mail:** bpgoffice@wjgnet.com  
**https://**www.wjgnet.com

risk of developing AL. After multivariate analysis only preoperative complications, totally laparoscopic total gastrectomy and neoadjuvant chemotherapy were independent risk factors for AL. Although the goal and the importance of this study are clear, there are some concerns and questions which I will explain below.

**General** The verb tenses used in the manuscript should be thoroughly revised. For example, in the introduction the past tense is often used. In the method sections, the verb tenses used change throughout the paragraph.

**Abstract**

1. Aim: consider to add in what type of operations IMBT is investigated.
2. Methods: Please explain what the experimental group and control group are.
3. Results: important results such as total included patients, the amount of patients in IMBT group and control group are not described. Besides that, the order in which the results are showed is illogical. "There were no PAL when an intraoperative leak led to concomitant intraoperative repair. Moreover, 15 patients (2.9%) developed PALs, with a higher incidence in the control group than in the experiment group (4.3% vs. 0.9%, P=0.026)." Please rewrite this sentences, unclrear.

**Introduction**

1. Please rewrite the sentence: "However during laparoscopic radical gastrectomy, there was no study to date that assesses anastomotic integrity after systematically searching the literature". I understand what you want to say, but it is a strange sentence.

**Methods**

**Patients**

1. Consider to rename the two groups. experimental and control maintain the appearance that an active "new" intervention has taken place. However, it is a retrospective study where apparently IMBT was already used in daily practice.
2. Please replace the last part of this paragraph "In our department .. Reflux esophagitis" to the next paragraph 'Surgical methods and postoperative management'.

**Methylene Blue Testing Technique**

1. I do not understand why some patients received IMBT and the others didn't. Was it the surgeons decision? If yes, was it because the surgeon did not trust the created anastomosis (less experienced surgeon)? Were there signs to doubt the anastomotic integrity (difficult/long operation)?



**Baishideng  
Publishing  
Group**

7041 Koll Center Parkway, Suite  
160, Pleasanton, CA 94566, USA  
**Telephone:** +1-925-399-1568  
**E-mail:** [bpgoffice@wjgnet.com](mailto:bpgoffice@wjgnet.com)  
**https://**[www.wjgnet.com](https://www.wjgnet.com)

Or was IMBT introduced at one point somewhere between 2017-2019 and the first 302 patients in the “control” group just did not receive IMBT because it was introduced after they were operated? (bias because of learning curve) 2. Please adjust the used verb tense. It changes throughout the whole paragraph. 3. What do you mean with “anal side of the anastomosis”? The distal part? Please change this description. Definition 1. What is the used definition of anemia? Hemoglobin level of < ..? 2. Please explain what the used definition of “malnutrition” is or where it was based on. Statistical analysis 1. Please check the word "analysis", sometimes the singular word and sometimes the plural word is used. Also change the corresponding verbs. Results Comparison of the incidence of PAL 1. Please describe the number of patients that developed AL in de group that received IMBT and the number of patients in de group that didn't receive IMBT. The risk factors analysis of PAL 1. Please add to the risk factor “totally laparoscopic gastrectomy” if it is about the total gastrectomy or the distal gastrectomy.