

HOSTED BY

Available online at www.sciencedirect.com

ScienceDirect

journal homepage: <http://www.elsevier.com/journals/international-journal-of-nursing-sciences/2352-0132>

Original Article

Clinical observation of radical total gastrectomy without postoperative gastrointestinal decompression in elderly patients with gastric cancer

Jin-xiu Hu ^a, Lun-lan Li ^{b,*}, Fen Dai ^a, He-ying Wu ^a^a Department of Cadres Surgery, The First Affiliated Hospital of Anhui Medical University, Hefei 230022, Anhui, China^b Department of Nursing, The First Affiliated Hospital of Anhui Medical University, Hefei 230022, Anhui, China

ARTICLE INFO

Article history:

Received 23 August 2014

Received in revised form

26 January 2015

Accepted 28 January 2015

Available online 18 February 2015

Keywords:

Gastrectomy

Gastric cancer

Gastrointestinal decompression

Intubation

ABSTRACT

Purpose: To investigate the safety and feasibility of radical total gastrectomy without postoperative gastrointestinal decompression in elderly patients with gastric cancer.

Methods: Elderly patients (65–80 years of age) hospitalized with gastric cancer from May 2009 to August 2012 were selected to receive radical total gastrectomy with (controls, $n = 39$) or without ($n = 37$) postoperative gastrointestinal decompression. Postoperative recovery conditions and associated complications were observed and compared.

Results: In the group without decompression, the first passage of flatus post-operation was significantly earlier, and scores of nausea, pharyngitis, insomnia, and post-operative ambulation limitation were significantly reduced compared to controls (all $p < 0.01$). However, there were no differences in the degree of abdominal distension, time to first anal defecation, or incidence of postoperative complications between the groups.

Conclusion: Gastrointestinal decompression is not necessary after total gastrectomy in elderly gastric cancer patients, and may improve patient comfort and recovery.

Copyright © 2015, Chinese Nursing Association. Production and hosting by Elsevier (Singapore) Pte Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

Gastric cancer (GC) is the fourth most common type of cancer and the second most frequent cause of cancer mortality, and

thus remains an important public health problem [1,2]. Moreover, the incidence of GC increases with age, thus placing elderly patients at an increased risk [1,3,4]. Treatment of GC is limited because of its genetic complexity and heterogeneity [2], though total gastrectomy is the primary surgical therapy.

* Corresponding author.

E-mail address: ayfyhjx@163.com (L.-l. Li).

Peer review under responsibility of Chinese Nursing Association.
<http://dx.doi.org/10.1016/j.ijnss.2015.01.007>

2352-0132/Copyright © 2015, Chinese Nursing Association. Production and hosting by Elsevier (Singapore) Pte Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Advanced surgical techniques and supportive measures allow for reasonable safety with minimal disabling side effects from this procedure [5–7]. However, elderly patients have an increased risk for morbidity and mortality after surgery [8,9], and thus greater attention should be paid to treatment for this group of patients.

Gastrointestinal (GI) decompression is a routine treatment following GI surgeries, such as gastroenterostomy, enterostomy, and cecostomy [10]. GI decompression provides for drainage of air and gastric contents from the stomach and intestines, thus reducing nausea, vomiting, pulmonary complications, and the risk of anastomotic leakage and surgical wound complications, thereby accelerating the recovery of GI function [11]. However, increasing evidence indicates that postoperative GI decompression is unnecessary [12,13], and potentially deleterious [14,15]. Some studies report that the incidence of immediate postoperative complications (infection and dehiscence of the wound or anastomotic leakage) is not affected by performing GI decompression [16,17], whereas others show bowel movements return earlier with a lower incidence of pulmonary complications in patients for whom the procedure is not performed [18–21]. Furthermore, GI tube placement is contraindicated for cases with uncorrectable coagulopathy, hemodynamic instability, respiratory compromise, and certain anatomic alterations [22]. Therefore, the aim of the present study was to evaluate the need for GI decompression after total gastrectomy in elderly GC patients, and the impact the procedure has on postoperative recovery and complications.

2. Methods

2.1. Patients

Seventy-six elderly patients met the criteria with GC that were scheduled to undergo radical total gastrectomy in our department between May 2009 and August 2012 were recruited for this study. Patients were randomly assigned to receive (control group; $n = 39$) or go without (experimental group; $n = 37$) postoperative GI decompression. All the patients were fully informed about the objectives and methods of this study and provided informed consent. The study was approved by the ethical committee of the First Affiliated Hospital of Anhui Medical University.

2.1.1. Inclusion criteria

For inclusion in the study, patients were required to be: i) 65–80 years of age; ii) diagnosed with GC by gastroscopy and pathological examination; and iii) without metastasis.

2.1.2. Exclusion criteria

Patients were excluded if they: i) received radiotherapy or chemotherapy simultaneously; ii) had a medical history of laryngitis, chronic bronchitis, or emphysema; and iii) had comorbid diseases, such as diabetes and chronic liver disease.

2.2. Procedures

Disposable nasojejunal tubes for postoperative nasogastric enteral nutrition (Nutricia Pharmaceutical co., LTD, Wuxi,

China) were inserted in all patients the morning of the surgery, and patients in the control group also received a disposable gastric tube (Rongye Technology Ltd., Yangzhou, China). Postoperative GI decompression in control patients was performed by connecting the gastric tube to a vacuum aspiration disk (Rongye Technology Ltd., Yangzhou, China) until first flatus after the operation. Nasojejunal tubes were vacuum sealed when nasogastric enteral nutrition was not being provided. All other interventions such as oral-care and health education conducted for both groups were the same.

2.3. Observed parameters

Postoperative recovery conditions that were observed and compared between the two groups included recovery of bowel function (abdominal distension and the times of the first flatus and anal defecation), and patient complaints of nausea, pharyngitis, sleep disruption, and ambulation limitation [scored as 0 (no symptom), 1 (slight), 2 (medium), and 3 (serious)]. In addition, the incidence of postoperative complications, including anastomotic leakage and pulmonary infection, was observed throughout the hospitalization period.

2.4. Statistical analysis

All statistical analyses were performed using SPSS (version 12.0.1; SPSS Inc., Chicago, IL, USA). Differences between control and experiment groups were tested by Student's *t*, Mann-whitney *u*, or χ^2 tests; abdominal distension was compared using a repeated measure analysis of variance. Data are presented as mean \pm standard error mean, with $p < 0.05$ considered as statistically significant.

3. Results

3.1. Recovery of bowel function

Baseline patient and cancer characteristics did not differ between control and experimental groups (Table 1). Although abdominal distension changed significantly during the postoperative hospital stay (time effect: $F = 153.50$; $p < 0.01$), it was not affected by GI decompression (group effect: $F = 1.81$; $p = 0.18$), but there was a significant interaction between days and group (intercept effect: $F = 23666.14$; $p < 0.01$) (Fig. 1).

The time of the first flatus after the operation was earlier in experimental patients than that in the control group ($p < 0.01$) (Fig. 2). However, there was no difference between the groups regarding the time of first defecation.

3.2. Postoperative somatic complaints

Patients who did not receive GI decompression reported significantly lower scores for postoperative nausea, pharyngitis, disrupted sleep, and ambulation limitation ($p < 0.01$) (Fig. 3).

3.3. Postoperative complications

Anastomotic leakage only occurred in one patient in the control group, and was not different from the experimental

Download English Version:

<https://daneshyari.com/en/article/2655678>

Download Persian Version:

<https://daneshyari.com/article/2655678>

[Daneshyari.com](https://daneshyari.com)