enago
Author First, Quality First

Title page

Title: A novel, protective ~~and optimal,~~ flexible liver retraction method with clipping and suturing ~~techniques~~ in laparoscopic gastrectomy for gastric cancer

Short running title: Protective and optimal liver retraction

Authors

~~Keywords: Gastric cancer · Laparoscopic gastrectomy · Liver retractor~~

Conflict of interest:

There are no funding sources for this study or any associated financial conflicts.

Total words: 2794

ABSTRACT

Background: Retracting the lateral liver segment during laparoscopic distal gastrectomy is important ~~to achieve~~for achieving an optimal surgical field. However, excessive force ~~on~~may injure the liver ~~may cause liver injuries during perioperative period and a~~, causing temporary ~~rise in~~abnormalities ~~of~~in liver function ~~test~~s after laparoscopic surgery. ~~Since we~~We developed a new liver retraction method~~, we verified~~ and assessed its safety and ~~usefulness~~utility.

Patients and m~~M~~ethods:

~~This is a retrospective analysis using prospectively compiled~~We retrospectively analyzed

Comment [SE1]: Please note that the title is unnecessarily long and contains unnecessary words. There are no criteria for use of the word "optimal." In addition, while the meaning of "suturing" is self-evident, that of "clipping" is not. Please consider this title instead: "**A novel liver retraction method in laparoscopic gastrectomy for gastric cancer."**
If you choose to use it, please change it in the cover letter as well.

Comment [SE2]: Please note that that running title serves only to help the reader keep their place in the journal. A better running title would be "Liver retraction during laparoscopy."

Comment [SE3]: Please note that the journal instructs to mention the names of all the authors. Also, it requests the "highest academic degree." To be mentioned for them.

Comment [SE4]: Please place this statement under the Acknowledgement section after Conclusion to meet the journal guidelines.

Comment [SE5]: Please note that the journal does not ask for the word count on the title page. Please consider deleting this. If you choose to include it anyway, be sure to check the count in the final draft.

Comment [QA6]: Please note that it's better not to use the word "prospectively" here. Almost by definition, such clinical databases are "prospectively" designed, that is, the decision is made to establish a database containing particular items of clinical information. Data from subsequently treated patients are then included in the database. However, studies based on such previously compiled data almost always retrospective, as you have correctly stated regarding your study. The study is designed to take advantage of the data that has already been collected. These datamining studies are often very helpful in providing information that would be very difficult to obtain in a prospective study. The reason for avoiding the word "prospective" to describe the database is that some readers may be confused, reading both "retrospective" and "prospective" in the same sentence.

records in our surgical database ~~in our institute. Consecutive~~of consecutive surgical patients who underwent laparoscopic distal gastrectomy ~~(LDG)~~ for ~~229~~ early gastric cancer~~, were extracted from the database, and the perioperative data were obtained.~~. We divided the 229 patients into two groups ~~depending~~based on ~~whether our~~the liver retraction ~~technique (the Flexible LIver~~ method used, either flexible liver retraction ~~method~~ with ~~Clipping~~clipping and ~~Suturing techniques~~suturing (FLICS~~ group)~~)) or ~~Nathanson's~~the Nathanson retractor (NR~~ group) was used. After that, one~~). One-to-one propensity score matching was performed to ~~align patient backgrounds, and~~ match patients, resulting in the records of 53 pairs of cases ~~were~~ extracted~~. Serum AST, ALT, CRP and T-Bill were measured at~~ from the database. Operative and postoperative ~~days 1, 3, 5, 7 and~~ outcomes were assessed, including following the values of serum liver enzymes, total bilirubin, and C-reactive protein until postoperative day 30.

Results: There ~~was~~were no significant ~~difference~~differences in patient ~~background and~~characteristics or preoperative ~~examination data after PSM. There was no addition or change of Liver retractor.~~data in the two groups. No serious complications associated with liver ~~retractors~~retraction were observed in ~~both groups. No postoperative liver failure was observed in all patients.~~either group.

Conclusions: Our new liver retraction technique provided an optimal surgical field without inducing post-operative liver dysfunction. It is a simple, safe ~~protective new~~, and effective liver retraction technique.

~~(301 words)~~

Key words: ~~Laparoscopic~~laparoscopic gastrectomy, ~~Gastric~~gastric cancer, ~~Liver~~liver

Comment [SE7]: Please note that it's unnecessary to indicate the letters included in the abbreviation. Also, the word "method" is unnecessary in the middle of the term.

Comment [SE8]: Please note that it's unnecessary to keep repeating PSM.

Comment [SE9]: Please note that "optimal" is OK here, since there would be general agreement on what that means when describing visualization of the surgical field. That is different than its use in the title to describe a new method.

Comment [QA10]: This statement is not supported by your data. How "simple" is the procedure? Does it include less steps or easier to handle? Did you test that it is simpler than the previous procedure?

retraction, Internal Organ ~~retractor~~Retractor, Nathanson's retractor, propensity score-matched analysis.

Comment [SE11]: This needs to be capitalized if it is the actual brand name of the instrument. If not, it should be in lower case.

INTRODUCTION

Laparoscopic ~~distal~~ gastrectomy ~~(LDG)~~ has been widely used ~~for treating patients with~~in Japan since 1991 to treat gastric cancer ~~since 1991 in Japan~~ [1].

Comment [SE12]: It's preferable to introduce the abbreviation denoting a specific extent of gastrectomy later in the text, as this is a more general term.

[Other text deleted]

~~Therefore~~To avoid this problem, we ~~have~~ devised ~~and enforced~~a liver retraction method combining ~~Internal Organ~~use of an internal retractor with sutures to help lift ~~up by suture~~ the organ, which we designated flexible liver retraction with clipping and suturing (FLICS).

Comment [SE13]: It seems better to introduce this designation here rather than waiting until the Methods.

MATERIALS AND METHODS

Patients and characteristics

~~This is a retrospective analysis using prospectively~~We retrospectively analyzed patient records compiled in our institution's surgical database ~~in our institute. All patients were given sufficient explanations and written informed consents. Consecutive~~. Records of consecutive surgical patients who underwent laparoscopic distal gastrectomy (LDG) for gastric cancer~~,~~ were extracted from the database~~, and the~~. The following data were ~~obtained~~collected: patient characteristics (age, sex, performance status, American Society of Anesthesiologists Physical Status Classification [ASA-PS~~,~~], height, weight, body mass index [BMI, calculated as kg/m^2], tumor size, and histology), ~~body weight, body mass index (BMI, weight in kg divided by height in meters squared (kg/m^2))),~~ preoperative tumor data (clinical T status, clinical N status, clinical ~~Stage~~stage, Lauren classification, ~~presence or absence of pre-operative~~and

Comment [QA14]: Regarding informed consent, please state precisely what the consent was given for, likely either for the surgical procedure—which of course is standard—or for inclusion of the medical record in the database—if that was actually done. It is highly unlikely that the patients gave specific consent for inclusion in this retrospective study. That is rarely done because the data used is anonymous. Informed consent is generally waived for retrospective studies, so it is rather odd to see it mentioned here unless it is described more specifically. Either state specifically what was consented to or do not mention consent at all.

preoperative treatment~~, pre-operative~~ with endoscopic submucosal dissection), preoperative laboratory ~~data (the~~ ALB (values (serum albumin~~), PT (~~, prothrombin time~~), CRP (~~, C-reactive protein~~), γ-GTP (Gamma~~ [CRP], gamma-glutamyl transpeptidase~~), T-Bil (Total Bilirubin),~~ surgical ~~outcomes~~outcome including intraoperative events (surgical approach, operative time~~ and~~, and immediate intraoperative ~~immediate~~ complications~~ (if any)),~~ postoperative course and laboratory tests of liver function, and mid-term and long-term outcomes. TNM staging was based on the Japanese Classification of Gastric Carcinoma, 3rd English Edition [18].

~~. Finally, patients who satisfied inclusion criteria were divided into the FLICS group and the NR group. The clinical characteristics and perioperative outcomes were compared between the two groups after propensity score matched (PSM).~~ (A, B, or C).

Liver retraction ~~method during LG at our hospital~~methods

Nathanson retractor

~~In use of Nathanson Liver Retractor, the liver retractor is~~The NR was inserted close to the xiphoid process and then placed near the hepatic ~~hilus~~hilum under the lateral segment of the liver. ~~Basically, Retractor~~ The retractor was fixed during surgery~~, and fixation was changed when~~ or repositioned as necessary to provide an adequate surgical field ~~deployment accompanying Liver retraction was necessary.~~ ~~In addition, when~~ . If the pressure applied was strong~~,~~ enough to cause congestion ~~and ischemic findings were observed, weakened~~or signs of ischemia, the pressure ~~of~~on the liver was weakened.

Flexible liver- retraction ~~method~~ with clipping and suturing ~~techniques (FLICS)~~technique

Details of the FLICS procedure are ~~described~~shown in Figure 2. ~~When using~~ Along with the

Comment [SE15]: Please check that this correctly conveys the intended meaning. This is the only preop treatment listed in Table 1.

Comment [SE16]: Only abbreviations that will be used again in the text and which stand for complex terms should be used. The words "albumin," "prothrombin time," and "bilirubin" don't need to be abbreviated. Subsequent uses of the latter don't need the word "total," as you've already stated here that you mean total bilirubin. (English does not require repetition of adjectives once the term is clearly understood.).

Comment [SE17]: Most journals require that an abbreviation should be spelled out at its first occurrence in the abstract as well as in the text followed by the abbreviation in parentheses. Thereafter, only the abbreviation may be used. However, if the abbreviation is on the journal's list of approved abbreviations, this need not be done. Similarly, please check for any other abbreviations used in the manuscript.

Comment [QA18]: Since this has an entire paragraph explaining the procedure below, there is no need to mention it here.

Comment [QA19]: Please check that this correctly conveys the intended meaning. The original was unclear. Instruments and apparatus can be deployed in the surgical field. The surgical field itself is not "deployed."

Comment [SE20]: Please check that this revised paragraph correctly conveys the intended meaning. We believe the revision appropriately describes what is very nicely represented in Figure 1.

Comment [SE21]: Please note that Figure 1 is not cited in the manuscript and hence the citation of all the figures should be ensured.

Internal Organ Retractor, ~~48mm Straight~~48 mm straight needle 2-0 ~~PLOLENE~~ prolene sutures (Ethicon Endo-Surgery, Cincinnati, OH, USA) ~~was~~were used for traction. ~~Under~~During pneumoperitoneum, ~~puncture~~ the right hypochondrium was punctured and ~~lift~~ the hepatic crown lifted to the right temporal side with ~~using 2-0 PLOLENE.~~the suture. After dissection of the lesser omentum, ~~Internal Organ Retractor~~the retractor was inserted into one of the 12- mm trocars~~,~~ and clipped to the cut edge of ~~lesser~~the omentum ~~was grasped by the applicator.~~ Liver retraction ~~wad finished~~was accomplished by ~~towing from outside~~external traction on the ~~body~~sutures.

[Other text deleted]

It was performed using a logistic regression model ~~and~~with the following covariates: ~~Age, Sex~~age, sex, ASA-PS, BMI, histology, preoperative laboratory data~~(ALB, PT,~~ (albumin, prothrombin time, CRP, AST, ALT, ~~T-Bil,~~ bilirubin, and ALP), preoperative treatment~~, Location,~~ with endoscopic submucosal dissection, Lauren classification, and preoperative clinical stage.~~–~~

[Other text deleted]

Elevations of serum liver ~~enzyme in blood test was~~ enzymes were evaluated ~~based on CTCAE and~~on the basis of the Common Terminology Criteria for Adverse Events Version [22], with an abnormal value ~~was~~ defined as ≥3 times the upper limit of normal ~~value [22].~~

Statistical analysis

All statistical calculations were performed with JMP® PRO software (JMP version 13.1.0, SAS Institute, Cary, NC, USA). All values were two- tailed, and *P*- values <0.05 were considered significant. We used a caliper width of 0.2 of the pooled standard deviation of the

Comment [QA22]: Please note that this the best term to use in all subsequent mention in the description of the procedure. In general, generic terms are preferred once the appropriate proprietary information has been supplied. But using the word "suture" throughout this description is particularly important since it is part of the name you have given your procedure, FLICS.

Comment [SE23]: Please check that this correctly conveys the intended meaning. Since "clipping" is a key term in the name of your method, it should be used explicitly in describing the technique.

Comment [QA24]: In the Conclusion section, you claimed that this new method is simple, however, you do not compare it properly with Nathanson retractor. How long (minutes) it takes to accomplish the new procedure?

Comment [SE25]: Please check that this correctly conveys the intended meaning. This was listed (without defining ESD) in Table 1. Specific information like this should not be mentioned in a table without inclusion in the text.

Comment [QA26]: Please note that precise definitions are required for all the possible liver outcomes, including "damage," "dysfunction," and "failure," and perhaps as well even for "inflammation." This is necessary in part. Elevated enzymes of course are not a measure of function but rather of damage to hepatocytes, which may or may not be associated with impaired synthetic or metabolic function of the liver as a whole. Such imprecision may not matter clinically, since we usually understand when we are talking about damage and/or dysfunction. But in a report such as yours, every outcome must be carefully defined along with the way it was measured. This is true even if none of the serious outcomes actually occurred. It would be best to do this in the Methods section, so that the terms needn't be explained in the Results. Technically, they should also be defined at the foot of Table 2. We assume a low albumin and/or a high prothrombin time would have been considered evidence of dysfunction. Please, however, don't make your readers assume what you mean.

logit of the propensity score for PSM.

RESULTS

~~patient~~ Patient characteristic~~ss after PSM analysis~~

~~The~~ Figure 3 depicts the study flow chart ~~is described in Figure 3.~~. Between ~~2012~~ January 2012 and ~~2016~~ December 2016, a total of 1,432 patients with gastric cancer ~~patients~~ were admitted to ~~institute. During this period,~~our institution, of whom 434 ~~patients~~ who underwent ~~Laparoscopic gastrectomy~~LDG for clinical early-stage gastric cancer (cT1N0M0, ~~Clinical Stage~~ clinical stage I~~) were identified in a retrospectively maintained database. The reasons).~~ Reasons for exclusion ~~criteria before PSM analysis were as follows: multiple~~ of records from the study included other organ resections (*n*~~=~~ = 65), ~~over~~a higher clinical stage ~~II~~ (*n*~~=~~ = 67), use of other liver retraction techniques (*n*~~=~~ = 85~~). In addition to the above, the patients with~~), or the presence of chronic liver damage ~~and~~or a history of alcohol abuse or ~~liver disease such as~~ of hepatitis ~~B virus, hepatitis C virus, and acute viral hepatitis were excluded from the study. Finally, 160 LDG with~~ A, B, or C.

After PSM, the ~~FLICS and 69 with the NR patients were enrolled in this study.~~

~~The clinical characteristics and short-term and long-term outcomes were compared between the two groups after PSM analysis. A total~~records of 106 patients ~~with laparoscopic distal gastrectomy~~who had undergone LDG for early gastric cancer were included in the study~~:~~, 53 ~~patients (50%) were included~~ in the FLICS group~~,~~ and ~~the remaining~~ 53 ~~patients were included~~ in the NR group.

~~The surgical outcomes of patients undergoing the FLICS group and NR group are detailed in~~ (Table 2~~. In the comparison of surgical characteristics, the~~) demonstrated a significantly

Comment [SE27]: Please ensure that this concept is correctly expressed. We are not familiar enough with the details of PSM to know the correct way to state it.

Comment [SE28]: Please note that the figure 405 in Fig. 3 was apparently incorrect and has been changed.

Comment [SE29]: Please note that this directly contradicts the statement above that the initial 434 patients identified all had clinical stage 1 disease. **Please correct the discrepancy.**

Comment [QA30]: Please consider deleting these two sentences. Data in the figure should not be repeated in the text. There is no point in including the second sentence at all, since it merely repeats the method, not the result. I suggest replacing this part with "Figure # shows the exclusion criteria…"

Comment [SE31]: The percentage is meaningless, since you deliberately matched patients one-to-one.

shorter median ~~operation~~operative time ~~was shorter~~ in the FLICS ~~group~~ than in the NR group (~~224 min [140-300 min] vs. 262 min [191-336 min],~~ ~~*P*<~~ < 0.001). Both techniques provided a satisfactory view of the ~~working fields~~surgical field during ~~laparoscopic distal gastrectomy and~~LDG. There were no intraoperative complications ~~required any treatments~~ relating to retraction of the liver. Curative resection (R0) was achieved in all patients. The number of lymph nodes retrieved did not differ significantly between the two groups ($P = 0.185$).

~~Surgical complications classified as~~ More cases of Clavien–Dindo grade II or higher ~~are described in Table 2. Concerning~~ early postoperative complications~~, more cases (7 cases, 13.2%))~~ were observed in the NR ~~group~~ than in the FLICS group (7 cases, 13.2% vs. 3 ~~patients~~cases, 5.7%), but the difference was not statistically significant (~~p=~~*P* = 0.097) (Table 2). One patient in the NR group (1.9%) had a Clavien–Dindo class III ~~or higher complications, whereas no patients in the FLICS group. In the NR group, one case of~~ complication (anastomotic leakage ~~required~~requiring reoperation~~.~~) compared with none in the FLICS group. No liver dysfunction was found in ~~both groups. Curative resection (R0) was performed in all patients. No significant difference in number of retrieved lymph node was observed between the two groups (p=0.185). There was no 30-day or~~ either group. There was no in-hospital or 30 day mortality or postoperative liver failure in either group.

~~***Parameters of liver*** ***Liver damage*** ~~***and inflammatory status***~~***or inflammation***

~~After PSM analysis, there was~~ There were no significant ~~difference between two groups~~differences in ~~the patient's baseline levels~~results of ~~each~~ liver function tests~~.~~ ~~Circulating~~ at baseline between the two groups. ALT and AST levels increased significantly from baseline within 24~~-~~ hours following ~~operations~~surgery in ~~each group. The levels of~~

Comment [SE32]: Please note that data should not appear in both text and table. The numbers are easier to read in the table, so they are superfluous here.

Comment [SE33]: Please note that these two sentence were moved to this paragraph. They are about outcome, not complications, so they did not belong in their original place in the next paragraph on complications.

Comment [SE34]: Please note that mention of the Clavien-Dindo grades of complications is confusing in both text and table. It is particularly difficult to understand the reference to the patient with the anastomotic leak as having a "grade III or higher" complication. Please specify the exact grade—was it III, IV, or V? (You may have chosen a cutoff of ≥class III for statistical analysis, but when describing the only one that occurred, the grade should be described precisely.) If that complication was the only one that was grade III (or higher), were all the others grade II? (If so, they presumably would have required drug treatment other than with the medications allowed for grade I complications.) That seems to be what is indicated in the text, but it should not be stated there that they were "grade II or higher." Or were some the complications listed in Table 2 grade I and some grade II? Please clarify these various reference to the Clavien-Dindo classifications. One option for Table 2 would be to eliminate the Clavien-Dindo grade III item listed in the table but include a footnote with "Overall surgical complications" stating that the anastomotic leak was grade III but all others were grade II (or grade I or II, if that is correct).

Comment [SE35]: Please consider rounding the percentages to integers. When n is <100, using a decimal place implies a greater degree of precision than is possible.

Comment [QA36]: What is the definition of "liver dysfunction."? This should be stated either in the methods or at least at the bottom of the table. I suspect you mean disrupted production of albumin or coagulation factors. However, unless it is stated clearly, it is confusing to read that there was "no liver dysfunction" but the liver enzymes were elevated.

Comment [SE37]: Please note that this word is unnecessary. We do not measure ALT or AST anywhere else.

serum ALT on both groups. On postoperative day (POD) days 3, 5, and 7, both serum ALT (Fig. 4a) and AST (Fig. 4b) levels were statistically significantsignificantly higher in the NR group than in the FLICS group (Fig. 4a). Furthermore, levels of serum AST on POD 3, 5 and 7 were significant higher in the NR group than in the FLICS group (Fig. 4b). Peak of. On the other hand, the totalTotal bilirubin levels became the highest on POD 1 and gradually decreased thereafterwere also elevated in the first few days, but the levels did not differ significantly between groups (Fig. 4d).4c). The CRP showed the same trend as has a trajectory similar to that of the AST and ALT, and values, with the elevation in the FLICS group remainedremaining significantly lower than that in the NR group (*P* = = 0.0038) 004) (Fig. 4d).

Comment [QA38]: Please note that this abbreviation is unnecessary in the text. Having stated "postoperative days" here, every subsequent reference to "day" or "days" will be understood as meaning after the operation. It's fine to use "POD" in the figures if you want, as that is clearly defined in the legend.

Comment [SE39]: Please note that this was true only for the FLICS group. The graph clearly shows the level in the NR group peaking on day 2. It's better not to try to describe everything in detail in the text, since the figures show the results so clearly.

Comment [SE40]: Please be consistent in the number of decimal places that you report. There's no need to be so precise. In fact, some journals limit it to two decimal places. The size of the p value is not that important. It is either significant or not significant depending on the significance level you defined.

DISCUSSION

Comment [QA41]: The Discussion is expected to begin with a clear statement of the major findings of your study. Readers are aware of the study question that was stated (although not in question form) at the end of the Introduction. When they reach the Discussion, they expect to see the answer. The Discussion should not repeat the Introduction. We have edited the Discussion as written, but please consider revising it to begin with the main findings followed by further discussion of two to three points you consider most important. Please eliminate the repetition of information that was already stated in the Introduction.

The present study evaluated a demonstrated that FLICS, our new flexible liver retraction method without, was associated with only minimal transient elevation of liver enzymes and did not cause liver injury. During laparoscopic gastrectomyLDG, it is important to establish a good operative field and ensure an adequate working space.

Furthermore, investigation of hepatic injury on postoperative CT caused by use of Nathanson Liver Retractor duringIn a study using computed tomography, liver abnormalities were seen after use of the NR in 14 of 52 (27%) patients who had undergone laparoscopic gastrectomy for cancer and 2 of 11 (18%) who had had laparoscopic upper gastrointestinal surgery revealed some liver abnormality in 27% of LG performed cases and 18% of bariatric surgery [28]. Such damage to the liver is caused by the persistentPersistent strong exclusionretraction of the liver, occurring without noticing can result in damage that goes

Comment [SE42]: Please note that it is better not to state "naked" percentages. Please include number whenever possible. The 27% for those undergoing cancer surgery is a somewhat firmer proportion than the 18% who underwent bariatric surgery, simply because of the difference in the numbers. Care is usually taken with prospective studies to include enough numbers to yield adequate statistical power. This is often not possible in retrospective studies. That does not mean that such studies are invalid. But we should be cautious about generalizing from small numbers. By including the numbers from reference you cite, you help the reader understand how much weight to put on the finding.

unnoticed intraoperatively [8]. ~~To date, various~~Various liver retraction methods have been ~~done and~~ reported to reduce ~~the~~ damage to the liver [12,-17,-29,-30]. Kitajima et al. [17] suggested that ~~reducing~~liver damage could be prevented when using the NR by limiting the duration of liver retraction ~~and moving the position of~~, periodically repositioning the retractor, or ~~releasing it~~ intermittently ~~could avoid physical pressure by Nathanson Liver Retractor.~~releasing it. Although they demonstrated that their technique ~~is~~was safe and ~~useful~~effective, it is technically difficult to arrange~~prepare~~ ~~, and it is necessary to set up the hepatic relief again during surgery.~~ Our ~~retraction~~FLICS method can be continuously ~~carry out steady operative field deployment in order~~deployed to mobilize the liver to the patient's upper right side ~~of the patient, but~~ , allowing a clear surgical field. It is adaptable by changing the traction on the sutures, allowing adjustment as needed of fixation of the liver ~~is done with leeway, so adaptability is high enough that~~ as well as normal respiratory variation ~~remains~~.

[Other text deleted]

The ~~absence of elevation of~~fact that increases in liver ~~enzymes~~enzyme and CRP levels were less marked in the FLICS than the NR group confirms that FLICS is a ~~proof that our~~safer retraction method ~~is a compulsive excretion method against the liver~~.

We believe that the overall reliability of our results is enhanced by the one-to-one matching of ~~this~~the study ~~are very accurate by~~groups using PSM ~~to adjust the background factors as much as possible. Moreover, since this method is simple, stable and safe, it is considered to be very useful.~~, which should have reduced the influence of unknown confounders.

Acknowledgments

Comment [SE43]: Please check that this correctly conveys the intended meaning. The original was quite unclear, and the reference's Abstract didn't mention this point. (We did not have access to the full article.) The meaning of "exclusion of the liver" was unclear. I imagine it refers to excluding it from the surgical field but nonsurgeons (such as myself) might not understand it.

Comment [SE44]: Please note that the rewording of this sentence. The original was in part copied verbatim from the Abstract's conclusion. Word-for-word copying must be avoided unless included in quotation marks. However, it's better to restate the ideas in your own words.

Comment [QA45]: It is necessary to be more specific here and provide details on why it was difficult.

Comment [SE46]: Please note that we have deleted this clause as it was completely unclear. Would this correctly convey what you meant: "Intermittent release of tension was also required."?

Comment [SE47]: Please check that this correctly conveys the intended meaning. The final clause was understandable. Also, it is incorrect to indicate an absence of enzyme and CRP increases in the FLICS group. What's important is that the peak levels were lower than in the NR group.

Comment [SE48]: The limitations of the study have been described well. Study findings may be limited to variability in surgeon expertise. This limitation is not listed

Comment [SE49]: Please acknowledge all the people who has helped you in completion of this research and have contributed in some ways to come up with a novel outcome.

Table 1 Baseline characteristics of one-to-one propensity score-matched patients who underwent laparoscopic distal gastrectomy for gastric cancer

	FLICS group (n = 53)	NR group (n = 53)	P value
Age (years)	67 (34–79)	66 (27–91)	0.994
ASA-PS(1:2:3)	11 (20.8%):42 (79.3%):0 (0%)	11 (20.8%): 42 (79.3%):0 (0%)	1.000

[Other text deleted]

BMI: body mass index, cT: clinical T stage, cN: clinical N stage, ESD: endoscopic submucosal dissection,

Table 2 Operative and postoperative outcomes in patients who underwent laparoscopic distal gastrectomy for gastric cancer

	FLICS group (n = 53)	NR group (n = 53)	P value
Reoperation	0	1 (1.9%)	0.237
Postoperative hospital stay (days)	9.1 ± 1.8	15.1 ± 7.9	< 0.001
Overall surgical complications	3 (5.7%)	20 (37.7%)	< 0.001
Clavien–Dindo grade >III	0	1* (1.9%)	0.237
Liver dysfunction	0	0	0.237
Organ damage (including liver injury)	0	0	1.000

Comment [SE50]: P, p, *P*, or *p* are acceptable symbols, but one should be chosen and used consistently throughout the text, figures, and tables.

Comment [SE51]: Please check whether any P value of 1.000 should be stated. Generally a P of 1.0 or 0.0 is considered impossible.

Comment [SE52]: All first-time use abbreviations in main text or peripheral text must be defined.

Comment [SE53]: Please note that you discount this item in discussing the study limitations. Please consider deleting it from the table. If not, please at least mention it in the text of the Results, e.g. "Although the FLICS group had a shorter mean hospital stay, changes in hospital policy during the study period may have influenced this result."

Comment [SE54]: Please note that this item was indented. When left aligned, it appeared that it referred to all the items indented below it. However, it might be best to delete this item from the table entirely.

Comment [SE55]: As noted above in the text, this required definition.

Comment [SE56]: Please note that this is unclear. Do you mean "gross liver injury"? The fact that enzyme levels were elevated indicates at least microscopic injury.

Figure legendsLegends

Figure 1. Described Schematic of the flexible liver retraction with clipping and suturing method of handling 2-0 PLOLINE in extracorporeal operation. (a).

Figure 2. Our procedure of. Flexible liver retraction with Internal Organ retractor Puncture theclipping and suturing *in situ* during laparoscopic distal gastrectomy. (a–c) The right hypochondrium and lift is punctured by the suture needle and the hepatic crown lifted to the right temporal side (b–c). After dissection of lesser omentum.

[Other text deleted]

Comment [SE57]: Please note that the journal requests that figure legends be brief, with no more the 4 or 5 lines. We have revised them to shorten them as much as possible.

Comment [QA58]: Please consider reversing panels a and b in the figure, as well as the descriptions written here in the legend. The intraabdominal schematic should come first. The external tension only makes sense when one understands how the sutures are situated internally.

Comment [SE59]: Please consider rearranging the panels so that a–c are the top row, d–f the middle row, and g–i the bottom row. Because readers of English normally read from left to right, the natural tendency is also to look at a figure with multiple panels the same way. It's initially a bit confusing for the sequence of steps to be oriented vertically rather than horizontally.

Comment [SE60]: Please note that figure 2 is not been cited in the text. Please check.

Comment [SE61]: Please check that this correctly conveys the intended meaning. There was no description for panel a.