

PEER REVIEW HISTORY

Gynecology and Obstetrics Clinical Medicine publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below.

ARTICLE DETAILS

TITLE (PROVISIONAL)	Laparoscopic Lateral Suspension (Dubuisson) in the Treatment of Pelvic Organ Prolapse
AUTHORS	Luo, Can; Wei, Dongmei; Chen, Yueyue; Mei, Ling; Niu, Xiaoyu

VERSION 1 - REVIEW

REVIEWER	<i>Peng, Cheng</i> <i>The authors declare that they have no competing interests. There are no financial, personal, or professional relationships that could potentially influence the findings or conclusions presented in this article.</i>
REVIEW RETURNED	<i>13-Mar-2024</i>

GENERAL COMMENTS	Overall, this is a clear, concise, and well-written manuscript. The introduction is relevant and theory based. Sufficient information about the previous study findings is presented for readers to follow the present study rationale and procedures. There are only one issues associated with Publication. On page 7 line 134-135, the author(s) mention that "postoperative infection rate as high as 22% when non-absorbable suture was employed in sacrospinous ligament fixation" However, it is important to note that SSLF typically does not involve the use of mesh. It seems irrelevant to this article, so why cite this data? Once these questions are addressed, the article should be published.
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REVIEWER	<i>Liang, Shuo</i> <i>None.</i>
REVIEW RETURNED	<i>01-Apr-2024</i>

GENERAL COMMENTS	Thank you for the opportunity to review the manuscript on "Laparoscopic Lateral Suspension (Dubuisson) in the Treatment of Pelvic Organ Prolapse". This is really an important and interesting topic as this new surgical method has been widely used for the cure of POP in China. This review introduced the history and technique of LLS, the comparison of LLS and LSC in efficacy, the comparison of
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	LLS and NTR(native tissue repair) in uterus preservation, as well as the complications.
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VERSION 1 – AUTHOR RESPONSE

Major comments:

#1 strongly suggest the manuscript edited by native speaker for English. There were many phrases in Chinglish AND non-standard terminologies. For instance,

Line 77, “vaginal mass prolapse”usu. expressed as ”vaginal bulge” ;

Line 84, “pelvic support”, I think the author might try to express”pelvic floor support”,

Line 86-87 pls use the expression”anterior/middle pelvic compartment defect”

Line 88, Laparoscopic Colposacropexy (LSC), usu. presented as sacrocolpopexy.

and so forth.

#2 Session 1 : The history and surgical technique of LLS

Line 130~Line 135 “Presently, Dubuisson et al. recommend the use of absorbable suture, as the mesh fibrosiswhen non-absorbable suture was employed in sacrospinous ligament fixation”, I think this paragraph should be moved to the end of the 1st paragraph, after” incorporating various types of “non-absorbable sutures and novel absorbable tacks or fasteners”. As here discuss the choice of suture.

#3 Session2: Comparative Efficacy of LLS and LSC

1)Please compare two surgical methods from the following points : surgical indications, learning curve, efficacy (anatomic cure rate, subjective cure, surgical success, or recurrence) , pelvic floor functions and complications in the short- and long-term.

2)The stage II apical prolapse need to be treated? Be cautious for patient’s selection for LLS as the anti-mesh atmosphere around the world. Symptomatic stage II and above may be appropriate ?

4 Session 3 :

The author highlighted the LLS as a new type of surgery for apical plevic compartment prolapse compared with native tissue repair. But why only the hysterectomy is mentioned for apical prolapse and compared with the LLS? How about other surgical methods such as SSLF and ULS are not compared?

This section is more like emphasizing the advantage of LLS in preserving the uterus. I think it need to re-writing or add the comparisons between LLS and ULS/SSLF

#5 Session 4

This part discussed “Peri-operative Complications and Management in LLS , please add more information of complications management, such as pain, mesh exposure, and how to maintain the vaginal axis. The words described much on the complications, few on the management.

Dear Editorial Team, Dr. Chen, and Dr. Liang,

I hope this message finds you well. I wanted to express my sincere gratitude for taking the time to review our review article. Your insights and suggestions were incredibly valuable to us. We have carefully incorporated your suggested revisions into the original text, with the modified sections highlighted in red. Your feedback has undoubtedly enhanced the quality and clarity of our work. Once again, thank you for your invaluable contribution to this project. We truly appreciate your expertise and guidance.

Warm regards,

Can Luo

2024.4.14

Reviewer:1

Dr. Cheng Peng

Comments to the Author

Overall, this is a clear, concise, and well-written manuscript. The introduction is relevant and theory based. Sufficient information about the previous study findings is presented for readers to follow the present study rationale and procedures. There are only one issues associated with Publication. On page 7 line 134-135, the author(s) mention that “postoperative infection rate as high as 22% when non-absorbable suture was employed in sacrospinous ligament fixation” However, it is important to note that SSLF typically does not involve the use of mesh. It seems irrelevant to this article, so why cite this data? Once these questions are addressed, the article should be published.

Reply: Very thanks for your advice. We have removed this sentence form our paper.

Reviewer:2

Dr. Shuo Liang

Comments to the Author

Thank you for the opportunity to review the manuscript on “Laparoscopic Lateral Suspension (Dubuisson) in the Treatment of Pelvic Organ Prolapse”. This is really an important and interesting topic as this new surgical method has been widely used for the cure of POP in China. This review introduced the history and technique of LLS, the comparison of LLS and LSC in efficacy, the comparison of LLS and NTR (native tissue repair) in uterus preservation, as well as the complications.

Major comments:

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Line 77, “vaginal mass prolapse”usu. expressed as” vaginal bulge”;

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Line 86-87 pls use the expression”anterior/middle pelvic compartment defect”

Line 88, Laparoscopic Colposacropexy (LSC), usu. presented as sacrocolpopexy.

and so forth.

Reply: We have polished our grammar. We have changed in our paper. For example, we have changed “Laparoscopic Colposacropexy (LSC)” to sacrocolpopexy (SC).

#2 Session 1 : The history and surgical technique of LLS

Line 130~Line 135“Presently, Dubuisson et al. recommend the use of absorbable suture, as the mesh fibrosiswhen non-absorbable suture was employed in sacrospinous ligament fixation”, I think this paragraph should be moved to the end of the 1st paragraph, after” incorporating various types of “non-absorbable sutures and novel absorbable tacks or fasteners”. As here discuss the choice of suture.

Reply: We have changed in our paper. We have moved this sentence to the end of the 1st paragraph.

#3 Session2: Comparative Efficacy of LLS and LSC

1)Please compare two surgical methods from the following points : surgical indications, learning curve, efficacy (anatomic cure rate, subjective cure, surgical success, or recurrence) , pelvic floor functions and complications in the short- and long-term.

2)The stage II apical prolapse need to be treated? Be cautious for patient’s selection for LLS as the anti-mesh atmosphere around the world. Symptomatic stage II and above may be appropriate?

Reply 1: We have changed in our paper. In our paper, we have clarified the surgical indications, learning curve, efficacy, pelvic floor functions and complications in the short- and long-term.

about two surgical treatments. We have added one reference about the learning curve. Malanowska et al.(16) reported that LLS has a shorter learning curve (LSC: Max Operative Time: 245 min, Min Operative Time: 85 min; LLC: Max Operative Time: 280 min, Min Operative Time: 90 min), and it is technically less demanding than Laparoscopic SC.

Reply 2 The SC, in which the uterine or vaginal apex (after total hysterectomy) is fixed to the anterior longitudinal ligament of sacrum with pelvic floor repair materials such as a mesh, is now widely recognized as the gold standard technique for the treatment of symptomatic apical stage II and above prolapse (level I defect), and it has been carried out in clinical practice for nearly 30 years (23). SC included two paths: Abdominal Sacrocolpopexy (ASC) and Laparoscopic Sacrocolpopexy (LSC).

4 Session 3 :

The author highlighted the LLS as a new type of surgery for apical plevic compartment prolapse compared with native tissue repair. But why only the hysterectomy is mentioned for apical prolapse and compared with the LLS? How about other surgical methods such as SSLF and ULS are not compared?

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Reply: In this review paper, our main focus is to present the common application of NTR in POP, compared the efficacy between NTR and LLS, and ultimately talk about the preservation of the uterus in POP surgery.

Corrected: We added this paraphs to our paper: Common Native Tissue Repair (NTR) for correcting middle pelvic compartment defects included uterosacral ligament suspension (USLS) and sacrospinous ligament fixation (SSLF) (32). A meta-analysis (33) revealed that compared to ASC, SSLF had a lower surgical cure rate (88.32% and 91.45%; OR 0.52; 95% CI 0.29–0.95; $p = 0.03$), higher recurrence rate (11.58% and 8.32%; OR 1.97; 95% CI 1.04–3.46; $p = 0.04$), and increased postoperative dyspareunia (14.36% and 4.67%; OR 3.10; 95% CI 1.28–7.50; $p = 0.01$). Another meta-analysis (34) demonstrated that the anatomical cure rate of laparoscopic USLS was 90% after an average follow-up of 22 months, with a subjective cure rate of 90.5%. In a randomized controlled trial published in 2023, the efficacy of USLS was compared with LLSF. At one-year postoperative follow-up, the anatomical cure rates were 34.6% and 40% for the anterior pelvic compartment ($P > 0.05$), 100% for both groups in the middle pelvic compartment, and 73.1% and 92% for the posterior pelvic compartment ($P > 0.05$). However, there are no clinical studies comparing LLS and USLS or LLSF.

#5 Session 4

This part discussed “Peri-operative Complications and Management in LLS, please add more information of complications management, such as pain, mesh exposure, and how to maintain the vaginal axis. The words described much on the complications, few on the management.

Reply: In LLS surgery, mesh application is necessary, with reported rates of mesh exposure ranging from 0% to 13%. However, these rates are closely linked to factors such as sample size, follow-up duration, and mesh type. In our review, we summarized the reported complications and their management in current studies, emphasizing the issue of vaginal axis alteration after LLS. Nevertheless, there is a lack of large-scale clinical studies addressing this issue and no standardized management protocols about vaginal axis. Therefore, we only raise this concern and cite literature for discussion. No severe complications following LLS have not been reported to date. We changed the small title as “Perioperative Complications in LLS”.

Editor(s)' Comments to Author (if any):

Associate Editor

Comments to the Author:

1.All references cited need to be checked carefully;

Reply: We have carefully checked them.

2.If possible, could the author provide a beautiful figure of LLS to increase the attractiveness, hand painted, or software made or citation photo both would be fine.

Reply: We have added Picture 1 in our paper from our group.

Figure 1. (A) and (C) showed uterus preserved during LLS procedure. (B) and (D) showed LLS combined with hysterectomy.

3.Reference cite: Keep 3 authors, journal names are abbreviated, such as:Obstet Gynecol;

All references should be formatted accordingly;

Reply: Corrected.

4. Other comments see attached

VERSION 2 – REVIEW

REVIEWER	<i>Liang, Shuo</i> <i>None.</i>
REVIEW RETURNED	20-Apr-2024

GENERAL COMMENTS	The reviewer's questions have been answered. The author had made the corresponding revision.
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REVIEWER	<i>Peng, Cheng</i> <i>I have no competing interests.</i>
REVIEW RETURNED	23-Apr-2024

GENERAL COMMENTS	This review article addresses the critical topic of pelvic organ prolapse (POP) management using Laparoscopic Lateral Suspension (LLS) techniques. The review provides valuable insights into the potential of LLS as an alternative surgical approach for POP, particularly in cases of middle pelvic compartment defects. With additional information on the search strategy, surgical details, and patient selection, this article will serve as a useful resource for clinicians interested in optimizing POP management.
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VERSION 2 – AUTHOR RESPONSE