

World Journal of *Clinical Cases*

World J Clin Cases 2022 January 7; 10(1): 1-396



Contents

Weekly Volume 10 Number 1 January 7, 2022

MINIREVIEWS

- 1 Omicron variant (B.1.1.529) of SARS-CoV-2: Mutation, infectivity, transmission, and vaccine resistance
Ren SY, Wang WB, Gao RD, Zhou AM
- 12 Hepatitis B virus reactivation in rheumatoid arthritis
Wu YL, Ke J, Zhang BY, Zhao D
- 23 Paradoxical role of interleukin-33/suppressor of tumorigenicity 2 in colorectal carcinogenesis: Progress and therapeutic potential
Huang F, Chen WY, Ma J, He XL, Wang JW

ORIGINAL ARTICLE

Case Control Study

- 35 Changes in rheumatoid arthritis under ultrasound before and after sinomenine injection
Huang YM, Zhuang Y, Tan ZM
- 43 Benefits of multidisciplinary collaborative care team-based nursing services in treating pressure injury wounds in cerebral infarction patients
Gu YH, Wang X, Sun SS

Retrospective Study

- 51 Outcomes and complications of open, laparoscopic, and hybrid giant ventral hernia repair
Yang S, Wang MG, Nie YS, Zhao XF, Liu J
- 62 Surgical resection of intradural extramedullary tumors in the atlantoaxial spine *via* a posterior approach
Meng DH, Wang JQ, Yang KX, Chen WY, Pan C, Jiang H
- 71 Vancomycin lavage for the incidence of acute surgical site infection following primary total hip arthroplasty and total knee arthroplasty
Duan MY, Zhang HZ
- 79 Distribution of transient receptor potential vanilloid-1 channels in gastrointestinal tract of patients with morbid obesity
Atas U, Erin N, Tazegul G, Elpek GO, Yıldırım B
- 91 Value of neutrophil-lymphocyte ratio in evaluating response to percutaneous catheter drainage in patients with acute pancreatitis
Gupta P, Das GC, Bansal A, Samanta J, Mandavdhare HS, Sharma V, Naseem S, Gupta V, Yadav TD, Dutta U, Varma N, Sandhu MS, Kochhar R

- 104** Influence of overweight and obesity on the mortality of hospitalized patients with community-acquired pneumonia
Wang N, Liu BW, Ma CM, Yan Y, Su QW, Yin FZ
- 117** Minimally invasive open reduction of greater tuberosity fractures by a modified suture bridge procedure
Kong LP, Yang JJ, Wang F, Liu FX, Yang YL
- 128** Increased levels of lactate dehydrogenase and hypertension are associated with severe illness of COVID-19
Jin ZM, Shi JC, Zheng M, Chen QL, Zhou YY, Cheng F, Cai J, Jiang XG
- 136** Age, alcohol, sex, and metabolic factors as risk factors for colonic diverticulosis
Yan Y, Wu JS, Pan S
- 143** Evaluation of right-to-left shunt on contrast-enhanced transcranial Doppler in patent foramen ovale-related cryptogenic stroke: Research based on imaging
Xiao L, Yan YH, Ding YF, Liu M, Kong LJ, Hu CH, Hui PJ
- 155** Characterization of focal hypermetabolic thyroid incidentaloma: An analysis with F-18 fluorodeoxyglucose positron emission tomography/computed tomography parameters
Lee H, Chung YS, Lee JH, Lee KY, Hwang KH

Clinical Trials Study

- 166** Low-dose intralesional injection of 5-fluorouracil and triamcinolone reduces tissue resident memory T cells in chronic eczema
Wu Y, Wang GJ, He HQ, Qin HH, Shen WT, Yu Y, Zhang X, Zhou ML, Fei JB

Observational Study

- 177** Alterations in blink and masseter reflex latencies in older adults with neurocognitive disorder and/or diabetes mellitus
Bricio-Barrios JA, Rios-Bracamontes E, Rios-Silva M, Huerta M, Serrano-Moreno W, Barrios-Navarro JE, Ortiz GG, Huerta-Trujillo M, Guzmán-Esquivel J, Trujillo X
- 189** Predicting adolescent perfectionism: The role of socio-demographic traits, personal relationships, and media
Livazović G, Kuzmanović K
- 205** Novel m.4268T>C mutation in the mitochondrial tRNA^{Leu} gene is associated with hearing loss in two Chinese families
Zhao LJ, Zhang ZL, Fu Y
- 217** Superior mesenteric venous thrombosis: Endovascular management and outcomes
Alnahhal K, Toskich BB, Nussbaum S, Li Z, Erben Y, Hakaim AG, Farres H

Randomized Controlled Trial

- 227** Zinc carnosine-based modified bismuth quadruple therapy *vs* standard triple therapy for *Helicobacter pylori* eradication: A randomized controlled study
Ibrahim N, El Said H, Choukair A

CASE REPORT

- 236 Acquired coagulation dysfunction resulting from vitamin K-dependent coagulation factor deficiency associated with rheumatoid arthritis: A case report
Huang YJ, Han L, Li J, Chen C
- 242 Intraoperative thromboelastography-guided transfusion in a patient with factor XI deficiency: A case report
Guo WJ, Chen WY, Yu XR, Shen L, Huang YG
- 249 Positron emission tomography and magnetic resonance imaging combined with computed tomography in tumor volume delineation: A case report
Zhou QP, Zhao YH, Gao L
- 254 Successful response to camrelizumab in metastatic bladder cancer: A case report
Xie C, Yuan X, Chen SH, Liu ZY, Lu DL, Xu F, Chen ZQ, Zhong XM
- 260 HER2 changes to positive after neoadjuvant chemotherapy in breast cancer: A case report and literature review
Wang L, Jiang Q, He MY, Shen P
- 268 Hyper-accuracy three-dimensional reconstruction as a tool for better planning of retroperitoneal liposarcoma resection: A case report
Ye MS, Wu HK, Qin XZ, Luo F, Li Z
- 275 Recurrent postmenopausal bleeding - just endometrial disease or ovarian sex cord-stromal tumor? A case report
Wang J, Yang Q, Zhang NN, Wang DD
- 283 Complex proximal femoral fracture in a young patient followed up for 3 years: A case report
Li ZY, Cheng WD, Qi L, Yu SS, Jing JH
- 289 Bilateral Hypertrophic Olivary Degeneration after Pontine Hemorrhage: A Case Report
Zheng B, Wang J, Huang XQ, Chen Z, Gu GF, Luo XJ
- 296 Clinical characteristics and outcomes of primary intracranial alveolar soft-part sarcoma: A case report
Chen JY, Cen B, Hu F, Qiu Y, Xiao GM, Zhou JG, Zhang FC
- 304 Removal of laparoscopic cerclage stitches *via* laparotomy and rivanol-induced labour: A case report and literature review
Na XN, Cai BS
- 309 Cerebral venous sinus thrombosis in pregnancy: A case report
Zhou B, Huang SS, Huang C, Liu SY
- 316 Eustachian tube teratoma: A case report
Li JY, Sun LX, Hu N, Song GS, Dou WQ, Gong RZ, Li CT

- 323** Protein-losing enteropathy caused by a jejunal ulcer after an internal hernia in Petersen's space: A case report
Yasuda T, Sakurazawa N, Kuge K, Omori J, Arai H, Kakinuma D, Watanabe M, Suzuki H, Iwakiri K, Yoshida H
- 331** Lunate dislocation with avulsed triquetral fracture: A case report
Li LY, Lin CJ, Ko CY
- 338** Clinical manifestations and prenatal diagnosis of Ullrich congenital muscular dystrophy: A case report
Hu J, Chen YH, Fang X, Zhou Y, Chen F
- 345** Diagnosis and guidance of treatment of breast cancer cutaneous metastases by multiple needle biopsy: A case report
Li ZH, Wang F, Zhang P, Xue P, Zhu SJ
- 353** Test of incremental respiratory endurance as home-based, stand-alone therapy in chronic obstructive pulmonary disease: A case report
Dosbaba F, Hartman M, Batalik L, Brat K, Plutinsky M, Hnatiak J, Formiga MF, Cahalin LP
- 361** Diagnostic and surgical challenges of progressive neck and upper back painless masses in Madelung's disease: A case report and review of literature
Yan YJ, Zhou SQ, Li CQ, Ruan Y
- 371** Suspected cerebrovascular air embolism during endoscopic esophageal varices ligation under sedation with fatal outcome: A case report
Zhang CMJ, Wang X
- 381** An atypical primary malignant melanoma arising from the cervical nerve root: A case report and review of literature
Shi YF, Chen YQ, Chen HF, Hu X
- 388** Epidural blood patch for spontaneous intracranial hypotension with subdural hematoma: A case report and review of literature
Choi SH, Lee YY, Kim WJ

ABOUT COVER

Editorial Board Member of *World Journal of Clinical Cases*, Ravi Kant, MD, Associate Professor, Division of Endocrinology, Diabetes and Metabolism, Medical University of South Carolina/Anmed Campus, Anderson, SC 29621, United States. rkant82@hotmail.com

AIMS AND SCOPE

The primary aim of *World Journal of Clinical Cases* (WJCC, *World J Clin Cases*) is to provide scholars and readers from various fields of clinical medicine with a platform to publish high-quality clinical research articles and communicate their research findings online.

WJCC mainly publishes articles reporting research results and findings obtained in the field of clinical medicine and covering a wide range of topics, including case control studies, retrospective cohort studies, retrospective studies, clinical trials studies, observational studies, prospective studies, randomized controlled trials, randomized clinical trials, systematic reviews, meta-analysis, and case reports.

INDEXING/ABSTRACTING

The WJCC is now indexed in Science Citation Index Expanded (also known as SciSearch®), Journal Citation Reports/Science Edition, Scopus, PubMed, and PubMed Central. The 2021 Edition of Journal Citation Reports® cites the 2020 impact factor (IF) for WJCC as 1.337; IF without journal self cites: 1.301; 5-year IF: 1.742; Journal Citation Indicator: 0.33; Ranking: 119 among 169 journals in medicine, general and internal; and Quartile category: Q3. The WJCC's CiteScore for 2020 is 0.8 and Scopus CiteScore rank 2020: General Medicine is 493/793.

RESPONSIBLE EDITORS FOR THIS ISSUE

Production Editor: Lin-YuTong Wang; Production Department Director: Xiang Li; Editorial Office Director: Jin-Lai Wang.

NAME OF JOURNAL

World Journal of Clinical Cases

ISSN

ISSN 2307-8960 (online)

LAUNCH DATE

April 16, 2013

FREQUENCY

Weekly

EDITORS-IN-CHIEF

Bao-Gan Peng

EDITORIAL BOARD MEMBERS

<https://www.wjgnet.com/2307-8960/editorialboard.htm>

PUBLICATION DATE

January 7, 2022

COPYRIGHT

© 2022 Baishideng Publishing Group Inc

INSTRUCTIONS TO AUTHORS

<https://www.wjgnet.com/bpg/gerinfo/204>

GUIDELINES FOR ETHICS DOCUMENTS

<https://www.wjgnet.com/bpg/GerInfo/287>

GUIDELINES FOR NON-NATIVE SPEAKERS OF ENGLISH

<https://www.wjgnet.com/bpg/gerinfo/240>

PUBLICATION ETHICS

<https://www.wjgnet.com/bpg/GerInfo/288>

PUBLICATION MISCONDUCT

<https://www.wjgnet.com/bpg/gerinfo/208>

ARTICLE PROCESSING CHARGE

<https://www.wjgnet.com/bpg/gerinfo/242>

STEPS FOR SUBMITTING MANUSCRIPTS

<https://www.wjgnet.com/bpg/GerInfo/239>

ONLINE SUBMISSION

<https://www.f6publishing.com>



Removal of laparoscopic cerclage stitches *via* laparotomy and rivanol-induced labour: A case report and literature review

Xin-Ni Na, Ben-Shuo Cai

ORCID number: Xin-Ni Na 0000-0002-9179-4947; Ben-Shuo Cai 0000-0002-1484-4146.

Author contributions: Na XN reviewed the literature and drafted the manuscript; Cai BS collected the patient's information, provided the figure, and revised the manuscript; All authors have read and approved the final manuscript.

Informed consent statement:

Informed written consent was obtained from the patient for publication of this report.

Conflict-of-interest statement: The authors declare that they have no conflict of interest.

CARE Checklist (2016) statement:

The authors have read the CARE Checklist (2016), and the manuscript was prepared and revised according to the CARE Checklist (2016).

Country/Territory of origin: China

Specialty type: Obstetrics and gynecology

Provenance and peer review:

Unsolicited article; Externally peer reviewed.

Peer-review model: Single blind

Peer-review report's scientific quality classification

Xin-Ni Na, Ben-Shuo Cai, Department of Obstetrics and Gynecology, Shengjing Hospital of China Medical University, Shenyang 110004, Liaoning Province, China

Corresponding author: Ben-Shuo Cai, MD, Doctor, Department of Obstetrics and Gynecology, Shengjing Hospital of China Medical University, No. 36 Sanhao Street, Shenyang 110004, Liaoning Province, China. caibenshuo_sj@vip.163.com

Abstract

BACKGROUND

Laparoscopic cervical cerclage is performed for patients with abnormal cervical anatomy and/or transvaginal cervical cerclage failure. However, the method of removing the stitches to allow labour induction remains controversial. According to published literature, stitches are removed through laparoscopic or transvaginal methods. Herein, we report, for the first time, a case of a patient who had undergone laparoscopic cerclage, and then underwent removal of stitches by laparotomy and labour induction in the third trimester of pregnancy.

CASE SUMMARY

A patient who underwent laparoscopic cervical cerclage due to cervical insufficiency became pregnant naturally following the operation. At 31 wk of pregnancy, severe foetal malformations were found. To successfully induce labour, cerclage stitches were removed *via* laparotomy, and rivanol was injected directly into the uterus. Following successful induction of labour, the patient delivered a dead foetus.

CONCLUSION

This report provides a reliable scheme of removing cerclage stitches for patients who have undergone laparoscopic cerclage but experience severe foetal malformations.

Key Words: Laparoscopic cerclage; Pregnancy; Induced labour; Stitch removal; Case report

©The Author(s) 2022. Published by Baishideng Publishing Group Inc. All rights reserved.

Grade A (Excellent): A
 Grade B (Very good): 0
 Grade C (Good): C
 Grade D (Fair): 0
 Grade E (Poor): 0

Open-Access: This article is an open-access article that was selected by an in-house editor and fully peer-reviewed by external reviewers. It is distributed in accordance with the Creative Commons Attribution NonCommercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited and the use is non-commercial. See: <https://creativecommons.org/licenses/by-nc/4.0/>

Received: May 22, 2021

Peer-review started: May 22, 2021

First decision: October 18, 2021

Revised: October 27, 2021

Accepted: November 24, 2021

Article in press: November 24, 2021

Published online: January 7, 2022

P-Reviewer: De Carolis S, Tolunay HE

S-Editor: Wang JL

L-Editor: A

P-Editor: Wang JL



Core Tip: To the best of our knowledge, this is the first report of a case in which a patient, who had undergone laparoscopic cerclage, underwent removal of cerclage stitches *via* laparotomy and labour induction in the third trimester of pregnancy. This report highlights the advantages of this technique over other available methods. Moreover, this report presents the rarity of foetal abnormality or death in the third trimester in a woman who had laparoscopic cervical cerclage.

Citation: Na XN, Cai BS. Removal of laparoscopic cerclage stitches *via* laparotomy and rivanol-induced labour: A case report and literature review. *World J Clin Cases* 2022; 10(1): 304-308

URL: <https://www.wjgnet.com/2307-8960/full/v10/i1/304.htm>

DOI: <https://dx.doi.org/10.12998/wjcc.v10.i1.304>

INTRODUCTION

Cervical incompetence is the main cause of late-term abortion and premature delivery, for which cervical cerclage is the primary treatment[1,2]. Cervical cerclage is a surgical intervention involving the placement of stitches around the uterine cervix to prevent the shortening and opening of the cervix. Transvaginal and laparoscopic cerclage are the main methods. Transvaginal cerclage is the most widely used[3], while laparoscopic cerclage is used for patients with abnormal cervical anatomy and/or transvaginal cerclage failure. Laparoscopic cerclage is primarily used before or during the early stages of pregnancy, and the stitches are usually removed during caesarean section[4]. However, for patients with foetal abnormalities or second- or third-trimester foetal death, the method of removing the stitches to allow for labour induction remains controversial. In all previous cases of laparoscopic cerclage, labour induction was implemented in the second trimester, and cerclage stitches were removed either laparoscopically or transvaginally[5-10].

Herein, we report, for the first time, a case in which the patient, who had undergone laparoscopic cerclage, underwent removal of stitches by laparotomy and labour induction in the third trimester of pregnancy.

CASE PRESENTATION

Imaging examinations

Foetal three-dimensional ultrasonography showed 'tulip'-like external genitalia, external penis and scrotum transposition, single umbilical artery, disappearance of umbilical blood flow in the diastolic period, and foetal intrauterine growth restriction.

Laboratory examinations

No abnormal laboratory examinations.

Physical examination

No abnormal physical examination.

Personal and family history

No special personal and family history.

History of past illness

The patient experienced two miscarriages in the second trimester of pregnancy, one of which was caused by transvaginal cervical cerclage failure. Before the present pregnancy, laparoscopic cervical cerclage was performed under general anaesthesia, and the isthmus of the cervix was ligated with Mersilene tapes (RS22, Ethicon, NJ, United States).

History of present illness

During the routine obstetric examination, severe foetal malformations were identified through three-dimensional ultrasonography; thus, the patient requested for induced

labour.

Chief complaints

A 31-year-old woman (gravida 4, abortus 3) was admitted for labour induction at 31 wk of gestation because of severe foetal malformations.

FINAL DIAGNOSIS

The final diagnosis was foetal malformations.

TREATMENT

After relevant examinations, cerclage stitches were removed, and rivanol amniocentesis was performed for labour induction *via* laparotomy under combined spinal-epidural anaesthesia. A mini horizontal incision was made in the middle of the abdomen, and the cerclage stitches were separated carefully from the cervix and surrounding tissue to which they were closely adhered (Figure 1). The stitches were clipped and removed. Amniocentesis was then performed, and 0.2 g rivanol was injected into the uterine cavity. Finally, the abdominal incision was sutured routinely.

OUTCOME AND FOLLOW-UP

Two days following labour induction, the patient delivered a dead foetus and was discharged 2 days later.

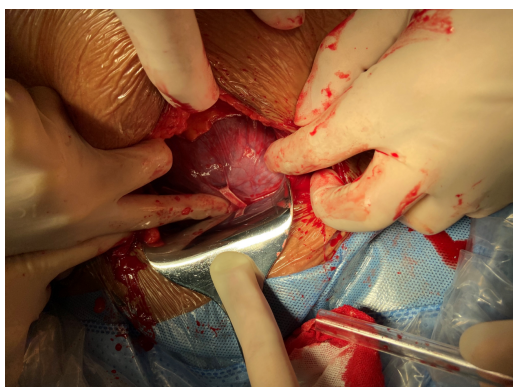
DISCUSSION

Laparoscopic cerclage is a type of trans-abdominal cervical cerclage. The isthmus of the cervix is sutured under laparoscopic guidance before or during early pregnancy. Compared with transvaginal cerclage, laparoscopic cerclage causes less trauma and has a lower risk of infection[11]. In addition, laparoscopic cerclage stitches are placed closer to the internal cervix, which more closely conforms to the normal physiological anatomy. Laparoscopic cerclage is effective not only in reducing the risk of cervical tear and infection but also in maintaining the expansion of the amniotic cavity[12,13]. In clinical practice, several obstetricians have performed this technique in women with cervical defects to extend the gestational age of the foetus, as well as in cases where transvaginal cerclage was not possible and in cases with repeated transvaginal cerclage failure.

Laparoscopic cerclage stitches can be removed by laparotomic, laparoscopic, and transvaginal approaches. For pregnant women with normal foetuses at full term or near term, caesarean section is commonly performed for delivery, and cerclage stitches were removed during the procedure[14]. For pregnancies that should be terminated because of foetal abnormalities or third-trimester foetal death, the methods of removing cerclage stitches and inducing labour remain controversial. Burger *et al*[6] reported three cases of removing transvaginal cerclage stitches in the second trimester. Carter *et al*[7-10] and other authors have reported laparoscopic removal of cerclage stitches in pregnancies terminated due to premature rupture of membranes or foetal abnormalities in the second trimester (Table 1). However, in the present study, the patient was already at 31 wk of pregnancy. She was informed of the risks of labour induction and caesarean delivery. Subsequently, she requested for induction of labour, but not caesarean section, to maintain the integrity of the uterus for future pregnancy. Therefore, we considered removing the stitches for a vaginal delivery. The enlarged uterus limited the surgical space in the abdominal cavity; therefore, laparoscopic removal of the stitches was not feasible. In addition, given the abundant pelvic blood supply during pregnancy, the stitches may be adhered to the surrounding tissue, and transvaginal stitch removal may cause injury to the surrounding tissue or intra-abdominal bleeding. Therefore, stitches were removed by laparotomy and rivanol was injected directly into the uterus to induce labour.

Table 1 Cases of inducing labour in the second trimester after laparoscopic cerclage

Author	Gestational age (wk)	Reason of removal	Method of removal
Nicole B. Burger[6]	16 + 5	Rupture of membranes	Posterior colpotomy
	19	Intrauterine infection	Posterior colpotomy
	23 + 3	Intrauterine infection	Anterior colpotomy
James F. Carter[7,8]	17	Foetal death	Laparoscope
	19	Rupture of membranes	Laparoscope
S E Scarantino[9]	16	Rupture of membranes	Laparoscope
Mohammed Agdi[10]	19	Oligohydramnios	Laparoscope

**Figure 1** A mini horizontal incision was made and the cerclage stitches were exposed.

To the best of our knowledge, no study has reported the removal of laparoscopic cerclage stitches *via* laparotomy simultaneously with labour induction in the third trimester. The method of terminating a pregnancy is usually restricted by trans-abdominal stitches, especially in cases with premature rupture of the membrane or foetal abnormality in the second or third trimester. Obstetricians should comprehensively assess the methods of removing cerclage stitches to reduce the risk of injury to the patients; this indicates the need to develop new laparoscopic cerclage techniques. Sukur and Saridogan[15] sutured cerclage stitches behind the cervical isthmus, allowing the removal of these stitches through the vagina. Shaltout *et al*[16] designed an improved laparoscopic cerclage, which involved opening the peritoneum folding between the uterus and the bladder, puncturing the needle through the posterior fornix of the vagina, and placing the suture knot in the posterior fornix. Among the 15 patients who underwent this new surgical method, 12 underwent induced vaginal delivery after the stitches were removed through the vagina. Wang *et al*[17] performed 'vaginal removal' of laparoscopic cervical cerclage without opening the peritoneum folding, through which the cerclage stitches can be sutured to the posterior fornix of the vagina. Procedures were performed on 13 patients, of which four underwent vaginal delivery after 36 wk of pregnancy. The improved laparoscopic cerclage enabled the removal of the stitches through the vagina and avoided potential traumas caused by transabdominal surgery.

CONCLUSION

Foetal abnormality or death in the third trimester of pregnancy in patients who have undergone laparoscopic cerclage is extremely rare. In the present case, cerclage stitches were removed by laparotomy and vaginal delivery was possible following successful induction of labour, which maintained the integrity of the patient's uterus. This is an alternative method for patients undergoing induced labour in the third trimester. In addition, obstetricians should improve prenatal examinations of patients who have undergone laparoscopic cervical cerclage during pregnancy to detect pregnancy-related complications as early as possible and thereby avoid adverse events. More

laparoscopic cerclage techniques should be developed, and existing techniques should be improved to increase the number of options available for removal of stitches.

REFERENCES

- 1 **Korb D**, Marzouk P, Deu J, Oury JF, Sibony O. Effectiveness of elective cervical cerclage according to obstetric history. *J Gynecol Obstet Hum Reprod* 2017; **46**: 53-59 [DOI: [10.1016/j.jgyn.2016.09.006](https://doi.org/10.1016/j.jgyn.2016.09.006)]
- 2 **Černohorská P**, Vitásková H, Kokrdová Z, Hájek Z, Koucký M, Pařízek A. Cervical cerclage - history and contemporary use. *Ceska Gynecol* 2019; **84**: 55-60 [PMID: [31213059](https://pubmed.ncbi.nlm.nih.gov/31213059/)]
- 3 **Sun X**, Ding XP, Shi CY, Yang HX, Jin YZ. Analysis of clinical effect of McDonald cervical cerclage and the related risk factors. *Zhonghua Fu Chan Ke Za Zhi* 2016; **51**: 87-91 [PMID: [26917475](https://pubmed.ncbi.nlm.nih.gov/26917475/) DOI: [10.3760/cma.j.issn.0529-567X.2016.02.002](https://doi.org/10.3760/cma.j.issn.0529-567X.2016.02.002)]
- 4 **Clark NV**, Einarsson JI. Laparoscopic abdominal cerclage: a highly effective option for refractory cervical insufficiency. *Fertil Steril* 2020; **113**: 717-722 [PMID: [32147177](https://pubmed.ncbi.nlm.nih.gov/32147177/) DOI: [10.1016/j.fertnstert.2020.02.007](https://doi.org/10.1016/j.fertnstert.2020.02.007)]
- 5 **Marchand GJ**, Masoud AT, Galitsky A, Sainz K, Azadi A, Ware K, Vallejo J, Anderson S, King A, Ruther S, Brazil G, Cieminski K, Hopewell S, Syed M. Complications of Laparoscopic and Transabdominal Cerclage in Patients with Cervical Insufficiency: A Systematic Review and Meta-analysis. *J Minim Invasive Gynecol* 2021; **28**: 759-768 [DOI: [10.1016/j.jmig.2020.11.014](https://doi.org/10.1016/j.jmig.2020.11.014)]
- 6 **Burger NB**, van 't Hof EM, Huirne JAF. Removal of an Abdominal Cerclage by Colpotomy: A Novel and Minimally Invasive Technique. *J Minim Invasive Gynecol* 2020; **27**: 1636-1639 [PMID: [32474172](https://pubmed.ncbi.nlm.nih.gov/32474172/) DOI: [10.1016/j.jmig.2020.05.022](https://doi.org/10.1016/j.jmig.2020.05.022)]
- 7 **Carter JF**, Savage A, Soper DE. Laparoscopic removal of abdominal cerclage at 19 wk' gestation. *JSLs* 2013; **17**: 161-163 [DOI: [10.4293/108680812x13517013317194](https://doi.org/10.4293/108680812x13517013317194)]
- 8 **Carter JF**, Soper DE. Laparoscopic removal of abdominal cerclage. *JSLs* 2007; **11**: 375-377 [PMID: [17931522](https://pubmed.ncbi.nlm.nih.gov/17931522/)]
- 9 **Scarantino SE**, Reilly JG, Moretti ML, Pillari VT. Laparoscopic removal of a transabdominal cervical cerclage. *Am J Obstet Gynecol* 2000; **182**: 1086-1088 [PMID: [10819835](https://pubmed.ncbi.nlm.nih.gov/10819835/) DOI: [10.1067/mob.2000.105404](https://doi.org/10.1067/mob.2000.105404)]
- 10 **Agdi M**, Tulandi T. Placement and removal of abdominal cerclage by laparoscopy. *Reprod Biomed Online* 2008; **16**: 308-310 [PMID: [18284892](https://pubmed.ncbi.nlm.nih.gov/18284892/) DOI: [10.1016/s1472-6483\(10\)60590-1](https://doi.org/10.1016/s1472-6483(10)60590-1)]
- 11 **Chen Y**, Liu H, Gu J, Yao S. Therapeutic effect and safety of laparoscopic cervical cerclage for treatment of cervical insufficiency in first trimester or non-pregnant phase. *Int J Clin Exp Med* 2015; **8**: 7710-7718 [PMID: [26221321](https://pubmed.ncbi.nlm.nih.gov/26221321/)]
- 12 **Xia E**, Huang X. Laparoscopic Cerclage for Prevention of Recurrent Pregnancy Loss Due to Cervical Incompetence. *J Minim Invasive Gynecol* 2015; **22**: S201 [PMID: [27679035](https://pubmed.ncbi.nlm.nih.gov/27679035/) DOI: [10.1016/j.jmig.2015.08.727](https://doi.org/10.1016/j.jmig.2015.08.727)]
- 13 **Tian S**, Zhao S, Hu Y. Comparison of laparoscopic abdominal cerclage and transvaginal cerclage for the treatment of cervical insufficiency: a retrospective study. *Arch Gynecol Obstet* 2021; **303**: 1017-1023 [DOI: [10.1007/s00404-020-05893-9](https://doi.org/10.1007/s00404-020-05893-9)]
- 14 **Vigueras Smith A**, Cabrera R, Zomer MT, Ribeiro R, Talledo R, Kondo W. Laparoscopic Transabdominal Cerclage for Cervical Incompetence: A Feasible and Effective Treatment in 10 Steps. *J Minim Invasive Gynecol* 2020; **27**: 1025-1026 [DOI: [10.1016/j.jmig.2019.10.019](https://doi.org/10.1016/j.jmig.2019.10.019)]
- 15 **Şükür YE**, Sarıdoğan E. Tips and tricks for laparoscopic interval transabdominal cervical cerclage; a simplified technique. *J Turk Ger Gynecol Assoc* 2019; **20**: 272-274 [PMID: [31088042](https://pubmed.ncbi.nlm.nih.gov/31088042/) DOI: [10.4274/jtgga.galenos.2019.2019.0028](https://doi.org/10.4274/jtgga.galenos.2019.2019.0028)]
- 16 **Shaltout MF**, Maged AM, Elsherbini MM, Elkomy RO. Laparoscopic transabdominal cerclage: new approach. *J Matern Fetal Neonatal Med* 2017; **30**: 600-604 [PMID: [27098713](https://pubmed.ncbi.nlm.nih.gov/27098713/) DOI: [10.1080/14767058.2016.1181165](https://doi.org/10.1080/14767058.2016.1181165)]
- 17 **Wang YY**, Duan H, Zhang XN, Wang S, Gao L. A Novel Cerclage Insertion: Modified Laparoscopic Transabdominal Cervical Cerclage with Transvaginal Removing (MLTCC-TR). *J Minim Invasive Gynecol* 2020; **27**: 1300-1307 [DOI: [10.1016/j.jmig.2019.09.774](https://doi.org/10.1016/j.jmig.2019.09.774)]



Published by **Baishideng Publishing Group Inc**
7041 Koll Center Parkway, Suite 160, Pleasanton, CA 94566, USA

Telephone: +1-925-3991568

E-mail: bpgoffice@wjgnet.com

Help Desk: <https://www.f6publishing.com/helpdesk>

<https://www.wjgnet.com>

