

## · 临床研究 ·

# 阴道全封闭术治疗老年女性盆腔器官脱垂的疗效

陈永连\*, 郑玉华, 王玉玲, 肇丽杰

(佛山市妇幼保健院妇科, 广东 佛山 528000)

**【摘要】目的** 分析老年女性盆腔器官脱垂(POP)患者实施阴道全封闭术的临床疗效及安全性。**方法** 选取2012年1月至2018年1月在佛山市妇幼保健院妇科住院治疗、盆腔器官脱垂分期法(POP-Q)评定为Ⅲ~Ⅳ期、并接受阴道全封闭术治疗的78例老年POP患者。所有患者治疗后进行1年随访观察,记录术前和术后POP-Q分期情况。分析患者盆腔症状及患者满意度情况。采用盆底功能障碍量表(PFDI-20)[包括尿失禁困扰量表(UDI-6)、结直肠肛门困扰量表(CRADI-8)、盆腔脏器脱垂量表(POPDI-6)]及盆底功能障碍影响量表(PFIQ-7)对患者术前和术后生活质量进行评价。采用 $\chi^2$ 检验对手术前后患者的盆腔器官脱垂症状等进行比较;采用t检验对患者手术前后的生活质量评分结果进行比较。**结果** 1例患者术后复发( $\geq II$ 期),总体疗效为98.71%( $\leq I$ 期)。POP患者外阴肿物脱出、盆腔坠胀感、尿频尿急症状、排尿困难、压力性尿失禁、排便困难等盆腔器官脱垂症状术后较术前明显减少,差异有统计学意义( $P<0.05$ )。患者术后主观满意度为100%。PFDI-20(UDI-6、CRADI-8、POPDI-6)和PFIQ-7量表评分术后较术前明显降低,差异有统计学意义( $P<0.05$ )。**结论** 对老年POP患者实施阴道全封闭术可显著降低患者的POP-Q分期及改善盆腔症状,术后患者满意度高,生活质量提高。

**【关键词】** 老年人; 阴道全封闭术; 盆腔器官脱垂; 临床疗效; 生活质量

**【中图分类号】** R713.3

**【文献标志码】** A

**【DOI】** 10.11915/j.issn.1671-5403.2021.02.026

## Efficacy of total colpocleisis in treatment of pelvic organ prolapse in elderly women

CHEN Yong-Lian\*, ZHENG Yu-Hua, WANG Yu-Ling, ZHAO Li-Jie

(Department of Gynecology, Foshan Maternal and Child Health Hospital, Foshan 528000, Guangdong Province, China)

**【Abstract】 Objective** To investigate the efficacy and safety of total colpocleisis in treatment of elderly women with pelvic organ prolapse (POP). **Methods** A total of 78 elderly women with POP quantification (POP-Q) stage of III~IV undergoing total colpocleisis in gynecologic department of Foshan Maternal and Child Health Hospital from January 2012 to January 2018 were recruited in this study. All patients were followed up for 1 year, and preoperative and postoperative POP-Q stages, pelvic symptoms and satisfaction were recorded and analyzed. Preoperative and postoperative quality of life were evaluated using the pelvic floor distress inventory short form-20 (PFDI-20) [including urinary distress inventory-6 (UDI-6), colorectal-anal distress inventory-8 (CRADI-8), pelvic organ prolapse distress inventory-6 (POPDI-6)] and pelvic floor impact questionnaire-7 (PFIQ-7). Chi-square test was used to compare the preoperative and postoperative POP symptoms, and student's t test was applied to compare the life quality between preoperation and post-operation. **Results** The overall efficacy was 98.71% ( $\leq$  stage I), and 1 case experienced recurrence ( $\geq$  stage II). POP symptoms, such as vulvar mass prolapse, pelvic distension, frequent urination and urgent to urinate, dysuria, stress urinary incontinence, and defecation difficulty were significantly reduced postoperation ( $P<0.05$ ). The subjective satisfaction was 100%. The points of PFDI-20 (UDI-6, CRADI-8, POPDI-6) and PFIQ-7 preoperatively were significantly lower than those preoperatively, with statistical differences ( $P<0.05$ ). **Conclusion** Total colpocleisis can significantly decrease the POP-Q stage and pelvic symptoms, and obtain postoperative satisfaction and quality of life in elderly POP patients.

**【Key words】** aged; total colpocleisis; pelvic organ prolapse; clinical efficacy; quality of life

**Corresponding author:** CHEN Yong-Lian, E-mail: gumy 2003@126.com

女性盆腔器官脱垂(pelvic organ prolapse, POP)是老年妇女的一种常见疾病,发病率随年龄的增长而增加,患病率达30%~50%。POP是由于盆底支

持组织的损伤或解剖结构薄弱引起盆腔脏器突出,表现为排尿排便困难和尿道刺激症状,严重影响了患者生活质量<sup>[1-5]</sup>。以往主要通过阴道或腹腔镜路

径修复盆腔解剖的自体组织或基于补片的盆底重建术进行治疗,但复发率高且并发症多<sup>[2,6]</sup>。对于重度子宫脱垂、不能承受大范围手术且无性功能需求的老年妇女,可采用阴道全封闭术。阴道全封闭术具有术后复发率低、手术风险小、疗效显著及远期生活质量明显改善的优势<sup>[1,2,5,7]</sup>。本研究通过对实施阴道全封闭术的老年POP患者治疗后的疗效及生活质量分析,为POP患者治疗提供重要的临床证据。

## 1 对象与方法

### 1.1 研究对象

选取2012年1月至2018年1月在佛山市妇幼保健院妇科住院治疗的78例老年POP患者为研究对象。纳入标准:(1)年龄≥70岁;(2)盆腔器官脱垂分期法(pelvic organ prolapse quantification, POP-Q)临床分期为Ⅲ~Ⅳ期;(3)存在重度盆腔器官脱垂,经保守治疗无效;(4)不能承受盆底重建术;(5)无性生活需求。排除标准:(1)有阴道性生活需求;(2)存在阴道感染、子宫及子宫颈恶性肿瘤,伴有严重内科或基础疾病无法耐受麻醉及手术者。所有患者均予以阴道全封闭术,术后随访1年。本研究通过了佛山市妇幼保健院伦理委员会审查批准。

### 1.2 阴道全封闭术

采用腰硬联合麻醉方式,在阴道前后壁黏膜下注射生理盐水形成水垫,以便紧贴阴道黏膜进行阴道前后壁黏膜分离,尽量多地保留直肠前筋膜及膀胱。将阴道前壁黏膜剥离处女膜2~3cm处,膨出的直肠筋膜及膀胱采用荷包缝合,采用“U”形缝合法缝合两侧肛提肌1~2针,最后采用连续锁边缝合法对阴道前后壁黏膜进行封闭。

### 1.3 观察指标及疗效标准

1.3.1 观察指标 (1)记录手术时间、术中出血量、住院天数及并发症情况;(2)POP-Q分期,根据美国妇产科学院盆腔器官脱垂临床实践指南(2009年)分为0~Ⅳ期<sup>[8]</sup>;(3)盆底功能障碍量表-20(pelvic floor distress inventory short form-20, PFDI-20),以及其3个分量表:尿失禁困扰量表-6(urinary distress inventory-6, UDI-6)、结直肠肛门困扰量表-8(colorectal-anal distress inventory-8, CRADI-8)和盆腔脏器脱垂量表-6(pelvic organ prolapse distress inventory-6, POPDI-6)。各分量表分别为6、8和6个

题目,每个题目评分为0~4分,分值越高,对生活质量影响越大<sup>[5,9]</sup>;(4)盆底功能障碍影响量表-7(pelvic floor impact questionnaire-7, PFIQ-7),得分越高,患者生活质量越差。随访方式包括电话随访及门诊、住院调查,量表评估于术后1年进行。

1.3.2 手术成功标准 盆腔最低点在处女膜上1cm(POP-Q≤Ⅰ期);主观满意度评价,根据患者对手术满意度分为非常满意、满意和不满意3个等级,满意度为非常满意和满意的患者占总例数的比例。

### 1.4 统计学处理

采用SPSS 22.0软件进行数据的统计学分析,计数资料用例数(百分率)表示,组间比较采用χ<sup>2</sup>检验;计量资料用均数±标准差(̄x±s)表示,组间比较采用t检验。P<0.05为差异有统计学意义。

## 2 结 果

### 2.1 患者基线资料

78例患者均行阴道全封闭术+会阴裂伤修补术,10例术前已切除子宫,68例术前有子宫者先行阴式全子宫切除,23例患者术中同行单/双侧附件切除术,10例合并压力性尿失禁者术中同时行尿道后韧带折叠术。患者年龄(75.20±4.23)岁,体质质量指数(25.26±3.48)kg/m<sup>2</sup>,孕次(3.58±1.53)次,产次(2.83±1.36)次,手术时间(105.41±21.82)min,出血量(85.21±21.25)ml,住院天数(10.21±4.51)d。

### 2.2 患者术前和术后POP-Q分期情况

术前Ⅲ期患者27例(34.62%),Ⅳ期患者51例(65.38%);术后0期患者75例(96.15%),Ⅰ期患者2例(2.56%),Ⅱ期患者1例(1.29%),术后疗效高达98.71%(≤Ⅰ期)。

### 2.3 患者术前和术后盆腔器官脱垂症状、术后满意度及并发症情况

与术前相比,患者术后外阴肿物脱出、盆腔坠胀感、尿频尿急症状、排尿困难、压力性尿失禁、排便困难等盆腔器官脱垂症状明显降低,差异有统计学意义(P<0.05;表1)。患者术后满意度为100%(非常满意+满意),术后未出现膀胱尿道损伤、盆腔脓肿、肠梗阻、下肢静脉栓塞、术后尿潴留等并发症。

### 2.4 患者术前和术后生活质量比较

患者术后PFDI-20、UDI-6、CRADI-8、POPDI-6和PFIQ-7量表评分均较术前明显降低,差异有统计学意义(均P<0.05;表2)。

表1 患者术前和术后盆腔器官脱垂症状比较

Table 1 Comparision of POP symptoms in elderly patients between preoperation and postoperation [n=78, n(%)]

Symptom	Preoperation	Postoperation	$\chi^2$	P value
Vulvar mass prolapse	78(100.00)	2(2.56)	143.200	0.001
Pelvic distension	49(62.82)	4(5.12)	55.324	0.001
Frequent urination and urgent to urinate	45(57.69)	4(5.12)	47.606	0.001
Dysuria	50(64.10)	5(6.41)	56.868	0.001
Stress urinary incontinence	10(12.82)	2(2.56)	4.424	0.035
Defecation difficulty	38(48.72)	4(5.12)	35.481	0.001

POP: pelvic organ prolapse

表2 患者术前和术后生活质量比较

Table 2 Comparison of life quality in elderly patients between preoperation and postoperation (n=78, points,  $\bar{x}\pm s$ )

Item	Preoperation	Postoperation	t	P value
PFDI-20	64.54±27.51	22.55±10.23	12.635	<0.001
UDI-6	26.88±16.87	9.57±6.18	8.509	<0.001
CRADI-8	9.34±6.12	3.14±3.05	8.008	<0.001
POPDI-6	31.28±12.33	10.15±6.29	13.482	<0.001
PFIQ-7	24.91±9.42	4.75±4.23	9.418	<0.001

PFDI: pelvic floor distress inventory short form; UDI: urinary distress inventory; CRADI: colorectal-anal distress inventory; POPDI: pelvic organ prolapse distress inventory; PFIQ: pelvic floor impact questionnaire.

### 3 讨论

POP 是女性盆腔器官(膀胱、肠、子宫等)在腹压升高等情况下出现下降移位,导致阴道、子宫内容物膨出,常表现为盆腔坠胀感、排尿排便困难等症状<sup>[9,10]</sup>。研究表明<sup>[11,12]</sup>,盆底结缔组织的成纤维细胞骨架蛋白、细胞外基质及易感基因等生物学因素及高龄、多胎妊娠、慢性腹压增高、高血压、糖尿病等多因素参与了POP 的发病。POP 患者大多采用外科手术治疗,包括盆腔重建术及阴道封闭术,但阴道盆腔重建术,术后复发率较高<sup>[6,10,13]</sup>。与盆腔重建术相比,对无保留阴道性功能需求的老年患者,阴道封闭术具有创伤小、出血量少、治疗效果显著、术后复发率及并发症发生率低的优势<sup>[10,13,14]</sup>。

阴道全封闭术是切除全部阴道后壁黏膜,将阴道进行全部封闭。阴道全封闭术患者保留子宫可能会存在宫颈病变不易筛查、宫腔积液、感染等问题,因此进行阴道全封闭术式一般需要切除子宫。本研究通过对无性生活需求的POP-Q III~IV期患者行阴道全封闭术治疗,随访观察1年,仅1例患者复发(Ⅱ期),总体疗效高,患者手术满意度高,术后盆腔器官脱垂症状明显缓解,且术后未出现膀胱尿道损伤、盆腔脓肿、肠梗阻、下肢静脉栓塞、术后尿潴留等

并发症,与以往的研究一致<sup>[5,10]</sup>。由此可见,阴道全封闭术对POP 患者疗效显著,患者满意度高,对临床治疗具有重要的意义。

本研究中,阴道封闭术虽然可明显改善患者的尿道刺激症状,但仍有少部分患者存在尿道症状,可能与解剖结构、雌激素水平和膀胱逼尿肌功能有关<sup>[5]</sup>。以往研究表明<sup>[9,10,15]</sup>,阴道封闭术患者存在术后复发,其原因可能与本身组织薄弱、长期大量体力活动及存在腹压增加的基础性疾病有关,本研究中有1例Ⅱ期复发患者,追问病史与以上原因有关。因此,阴道封闭术后患者应加强宣教,尽早治疗慢性咳嗽或便秘等增加腹压的疾病,术后多休息,尽量减少体力活动。POP 虽然并不会危及生命,但严重影响患者的生活质量<sup>[5,9,16]</sup>。本研究中,治疗后患者生活质量和社会功能明显改善。另外,今后需要扩大样本量进一步评价阴道全封闭术对POP 患者神经心理因素的影响,并探讨阴道全封闭术与部分封闭术的疗效,为提高患者生活质量提供精准的治疗方向。

综上所述,通过POP 分期、术后盆腔症状改善情况、患者满意度、并发症及术后生活质量量表评估,表明阴道全封闭术能够有效治疗POP,使盆腔症状明显减轻,提高了患者生存质量,值得临床进一步推广应用。

## 【参考文献】

- [1] Buchsbaum GM, Lee TG. Vaginal obliterative procedures for pelvic organ prolapse: a systematic review [J]. Obstet Gynecol Surv, 2017, 72(3):175–183. DOI: 10.1097/OGX.0000000000000406.
- [2] Petcharopas A, Wongtra NS, Chinthakanan O. Quality of life following vaginal reconstructive versus obliterative surgery for treating advanced pelvic organ prolapse [J]. Int Urogynecol J, 2018, 29(8):1141–1146. DOI: 10.1007/s00192-018-3559-9.
- [3] Wang X, Hu C, Chen Y, et al. LeFort colpocleisis for recurrent pelvic organ prolapse [J]. Int Urogynecol J, 2020, 31(2):381–384. DOI: 10.1007/s00192-019-03969-y.
- [4] Wilkins MF, Wu JM. Lifetime risk of surgery for stress urinary incontinence or pelvic organ prolapse [J]. Minerva Ginecol, 2017, 69(2):171–177. DOI: 10.23736/S0026-4784.16.04011-9.
- [5] 鞠蕊, 杨欣, 孙秀丽, 等. 阴道封闭术治疗重度盆腔器官脱垂老年女性的尿路症状疗效评价 [J]. 实用妇产科杂志, 2019, 35(11):836–841. DOI: CNKI:SUN:SFCZ.0.2019-11-017.
- Ju R, Yang X, Sun XL, et al. To investigate the improvement of urinary tract symptoms in elderly women with severe pelvic organ prolapse after colpocleisis [J]. J Pract Obstet Gynecol, 2019, 35(11):836–841. DOI: CNKI:SUN:SFCZ.0.2019-11-017.
- [6] Dallas KB, Rogo GL, Elliott CS. What impacts the all cause risk of reoperation after pelvic organ prolapse repair? A comparison of mesh and native tissue approaches in 110 329 women [J]. J Urol, 2018, 200(2):389–396. DOI: 10.1016/j.juro.2018.02.3093.
- [7] 王晶雪, 陆叶, 伍丹丹, 等. 改良阴道半封闭术与阴道全封闭术对老年女性盆腔器官脱垂的疗效比较 [J]. 中国医刊, 2017, 52(2):48–51. DOI: 3969/j.issn.1008-1070.2017.02.016.
- Wang JX, Lu Y, Wu DD, et al. The comparison of colpocleisis and modified partial colpocleisis in elderly patients with severe pelvic organ prolapse [J]. Chin Med, 2017, 52(2):48–51. DOI: 10.3969/j.issn.1008-1070.2017.02.016.
- [8] 杨欣, 王建六. 美国妇产科学院盆腔器官脱垂临床实践指南(2009年)解读 [J]. 中国妇产科临床杂志, 2011, 12(2):157–160.
- Yang X, Wang JL. Clinical practice guidelines for pelvic organ prolapse, American College of Obstetrics and Gynecology (2009) [J]. Chin J Obstet Gynecol, 2011, 12(2):157–160.
- [9] 董丽青. 阴道封闭术治疗老年女性盆腔器官脱垂的临床分析 [D]. 河北医科大学, 2018. DOI: 10.7666/d.D01514309.
- Dong LQ. Clinical analysis of colpocleisis in the treatment of pelvic organ prolapse in elderly women [D]. Hebei Medical University, 2018. DOI: 10.7666/d.D01514309.
- [10] Cho MK, Moon JH, Kim CH. Factors associated with recurrence after colpocleisis for pelvic organ prolapse in elderly women [J]. Int J Surg, 2017, 44:274–277. DOI: 10.1016/j.ijus.2017.06.086.
- [11] 朱雅佩, 孙智晶, 朱兰, 等. 盆底结缔组织的分子生物学变化在盆腔器官脱垂发病机制中的研究进展 [J]. 中华妇产科杂志, 2017, 52(11):785–788. DOI: 10.3760/cma.j.issn.0529-567x.2017.11.016.
- Zhu YP, Sun ZJ, Zhu L, et al. Molecular biological changes of pelvic floor connective tissue in the pathogenesis of pelvic organ prolapse [J]. Chin J Obstet Gynecol, 2017, 52(11):785–788. DOI: 10.3760/cma.j.issn.0529-567x.2017.11.016.
- [12] Isik H, Aynioglu O, Sahbaz A, et al. Are hypertension and diabetes mellitus risk factors for pelvic organ prolapse? [J]. Eur J Obstet Gynecol Reprod Biol, 2016, 197:59–62. DOI: 10.1016/j.ejogrb.2015.11.035.
- [13] 葛未, 蒋学禄. 重度盆腔器官脱垂的手术治疗 [J]. 浙江临床医学, 2017, 19(3):584–585.
- Ge W, Jiang XL. Surgery of severe pelvic organ prolapse [J]. Zhejiang Clin Med J, 2017, 19(3):584–585.
- [14] Wang X, Chen Y, Hua K. Pelvic symptoms, body image, and regret after LeFort colpocleisis: a long-term follow-up [J]. J Minim Invasive Gynecol, 2017, 24(3):415–419. DOI: 10.1016/j.jmig.2016.12.015.
- [15] Mikos T, Chatzipanteli M, Grimbizis GF, et al. Enlightening the mechanisms of POP recurrence after LeFort colpocleisis. Case report and review [J]. Int Urogynecol J, 2017, 28(7):971–978. DOI: 10.1007/s00192-016-3236-9.
- [16] 肖冰冰, 陆叶, 伍丹丹, 等. 阴道封闭术治疗老年女性重度盆腔器官脱垂的临床疗效和生活质量评价 [J]. 中国微创外科杂志, 2016, 16(11):983–986. DOI: 10.3969/j.issn.1009-6604.2016.11.007.
- Xiao BB, Lu Y, Wu DD, et al. Clinical efficacy and life quality evaluation of colpocleisis for severe pelvic organ prolapse in elderly women [J]. Chin J Minimally Invasive Surg, 2016, 16(11):983–986. DOI: 10.3969/j.issn.1009-6604.2016.11.007.

(编辑: 徐巍)