

doi: 10.3978/j.issn.2095-6959.2018.02.010

View this article at: http://dx.doi.org/10.3978/j.issn.2095-6959.2018.02.010

腹腔镜下广泛子宫切除术联合盆腔淋巴结清扫术对 早期宫颈癌患者手术时长及术后康复的影响

赵晓棠

(驻马店市中心医院妇产科, 河南 驻马店 463000)

[摘要] 目的: 探讨联合腹腔镜下广泛子宫切除术及盆腔淋巴结清扫术对早期宫颈癌患者手术时长及术后康复的影响。方法: 选取2014年2月至2016年8月驻马店市中心医院74例早期宫颈癌患者, 通过随机数字表法分为对照组与研究组($n=37$)。研究组联合采用腹腔镜下广泛子宫切除术及盆腔淋巴结清扫术, 对照组联合采用开腹广泛子宫切除术及盆腔淋巴结清扫术, 术后随访3~6个月。统计对比两组手术情况(手术时长、术中失血量、淋巴结清扫数目)、术后康复情况(肛门排气时间、肛门排便时间、拔管时间、抗生素应用时间、住院时间)、入院时及术后3, 6个月生活质量评分(Functional Assessment of Cancer Therapy-General, FACT-G)及并发症发生率。结果: 研究组手术时长较对照组长, 术中失血量较对照组少, 淋巴结清扫数目较对照组多($P<0.05$); 研究组肛门排气时间、肛门排便时间、拔管时间、抗生素应用时间、住院时间较对照组少($P<0.05$); 术前两组FACT-G分值比较差异无统计学意义($P>0.05$), 术后3, 6个月研究组FACT-G分值较对照组高($P<0.05$); 两组并发症发生率比较, 研究组5.41%(2/37)较对照组24.32%(9/37)低($P<0.05$)。结论: 联合采用腹腔镜下广泛子宫切除术及盆腔淋巴结清扫术治疗早期宫颈癌效果显著, 可有效减少手术创伤, 促使术后机体功能康复, 改善患者生活质量, 且并发症较少, 具有较高安全性。

[关键词] 腹腔镜下广泛子宫切除术; 盆腔淋巴结清扫术; 早期宫颈癌; 手术时长; 术后康复

Effect of laparoscopic extensive hysterectomy combined with pelvic lymph node dissection on operation duration and postoperative rehabilitation of patients with early cervical cancer

ZHAO Xiaotang

(Department of Gynaecology and Obstetrics, Zhumadian Central Hospital, Zhumadian Henan 463000, China)

Abstract **Objective:** To investigate the effect of combined laparoscopic hysterectomy and pelvic lymphadenectomy on operation time and postoperative rehabilitation of patients with early cervical cancer. **Methods:** Seventy-four cases of early cervical cancer were randomly divided into a control group ($n=37$) and a study group ($n=37$) in our

收稿日期 (Date of reception): 2017-11-08

通信作者 (Corresponding author): 赵晓棠, Email: 2430314575@qq.com

hospital from February 2014 to August 2016. The study group was treated with laparoscopic radical hysterectomy and pelvic lymph node dissection. The control group was treated with open hysterectomy and pelvic lymphadenectomy. All the cases were followed up for 3 to 6 months after operation. Two groups of surgery (surgical duration, intraoperative blood loss, number of lymph node dissection), postoperative rehabilitation (anal exhaust time, defecation time, extubation time, antibiotics time, hospitalization time), quality of life score [Functional Assessment of Cancer Therapy-General (FACT-G)] of 3 and 6 months at admission and after surgery, and the complication rate were statistically compared. **Results:** The duration of the study group was longer than that of the control group, the number of blood loss was less than that of the control group, and the number of lymph node dissection was more than that of the control group ($P<0.05$). The time of anal exhaust, anal defecation time, extubation time, antibiotic application time and hospital stay in the study group were less than those of the control group ($P<0.05$). There was no significant difference in FACT-G scores between the two groups before operation ($P>0.05$), and the scores of FACT-G in the study group were higher than those in the control group at 3 months and 6 months after the operation ($P<0.05$). Complication rates between the two groups were compared. The study group 5.41% (2/37) was lower than that of the control group 24.32% (9/37) ($P<0.05$). **Conclusion:** Laparoscopic radical hysterectomy combined with pelvic lymphadenectomy is effective in the treatment of early cervical cancer. It can effectively reduce the surgical trauma, promote the rehabilitation of the postoperative organism function, improve the quality of life of the patients, and have fewer complications with higher safety.

Keywords laparoscopic extensive hysterectomy; pelvic lymph node dissection; early cervical cancer; operation duration; postoperative rehabilitation

宫颈癌为妇科多发恶性肿瘤，好发于30~65岁年龄群体，病死率在女性生殖道恶性肿瘤总病死率中高居第2位，近些年随着生活习惯改变，疾病发病率不断增高，且发病人群趋向年轻化。研究^[1]指出，随着宫颈细胞学筛查逐渐普及，越来越多宫颈癌患者可于疾病发生早期得到确诊及治疗，在一定程度上降低了病死率。目前，临床用于宫颈癌治疗的措施包括放化疗及外科手术，其中手术为早期宫颈癌治疗关键。传统经腹广泛子宫切除术联合盆腔淋巴结清扫术为早期宫颈癌经典治疗方式，但具有创伤大、术野狭小、术后机体功能康复慢等弊端，且术后会遗留明显疤痕，难以被广大患者接受^[2-3]。因此，临床医学对如何安全、有效治疗早期宫颈癌进行了许多研究。上世纪90年代，腹腔镜术式以创伤小、术野清晰、术中操作灵活等优势在妇科多种疾病治疗中得到应用。国内外多项研究^[4-5]认为：于腹腔镜下实施手术操作，可经其放大作用准确辨别细小血管及盆腹腔结构，且实施盆腔淋巴结清扫时利于查看隐蔽区域中淋巴结。本研究选取我院74例早期宫颈癌患者进行分组研究，旨在探讨腹腔镜下广泛子宫切除术及盆腔淋巴结清扫术对早期宫颈癌患者手术时长及术后康复的影响。

1 资料与方法

1.1 一般资料

选取2014年2月至2016年8月我院74例早期宫颈癌患者。纳入标准：1)符合中华人民共和国国家卫生和计划生育委员会制定的宫颈癌临床诊断标准^[6]，经病理学检查确诊；2)宫颈癌国际妇产科联盟(the international federation of gynecology and obstetrics, FIGO)分期为I~IIA期；3)知晓本研究手术方案，签署同意书。排除标准：1)并发严重内科基础疾病，无法完整耐受手术者；2)并发严重盆腔炎者；3)并发其他恶性肿瘤疾病者；4)并发凝血功能障碍者。通过随机数字表法分为对照组与研究组($n=37$)。对照组34~62(48.41 ± 10.23)岁；FIGO分期：IA期5例，IB期28例，IIA期4例；病理类型：腺癌14例，鳞癌21例，腺鳞癌2例。研究组36~64(49.04 ± 10.11)岁；FIGO分期：IA期4例，IB期30例，IIA期3例；病理类型：腺癌15例，鳞癌21例，腺鳞癌1例。术后均根据患者病情进行化疗。两组年龄、FIGO分期、病理类型等临床资料比较无明显差异($P>0.05$)，且本研究经我院伦理委员会批准。

1.2 手术方法

研究组联合采用腹腔镜下广泛子宫切除术及盆

腔淋巴结清扫术: 全身麻醉, 外阴阴道常规消毒铺巾, 脐和剑突中点作切口(约1 cm), 置入气腹针, 置入10 cm套管及监视探头, 略垫高足部, 两侧中下腹行4个切口(约0.5 cm); 右侧盆侧腹膜剖开, 以超声刀离断右侧圆韧带外约1/3处, 同法离断左侧圆韧带, 上提右侧圆韧带近端与附件; 剖开上方腹膜并对阔韧带后叶予以分离, 对血管实施双极封闭处理, 卵巢动静脉经超声刀离断, 上提圆韧带近端, 并沿子宫旁将阔韧带前叶腹膜剪开, 分离、横向剪开膀胱子宫反折腹膜, 膀胱下推至宫颈外口, 自骨盆漏斗韧带断端将后腹膜向同侧髂总动脉剪开; 右侧漏斗韧带下方将阔韧带前叶腹膜及后叶腹膜横向剪开, 向下剪开前后腹膜, 同左侧方式下推膀胱; 以超声刀离断右侧卵巢固有韧带, 分离腰大肌脂肪结缔组织; 对髂外动脉前、右侧髂总动脉与周边淋巴脂肪组织进行自上至下清理; 继续对髂外静脉前淋巴脂肪组织予以游离, 向外牵拉以暴露髂内动脉, 分离淋巴脂肪组织, 髂血管最下缘对腹股沟淋巴结予以分离; 暴露髂外静脉后进入闭孔窝, 对闭孔神经予以分离; 自下至上分离闭孔窝淋巴脂肪组织, 左侧盆腔淋巴结清理措施同右侧; 剖开阔韧带前叶与膀胱腹膜反折, 膀胱下推; 两侧输尿管隧道前叶与后叶经双极电凝离断, 推开输尿管; 剖开子宫直肠间隙后将直肠下推, 以双极电凝于宫旁约3 cm处将两侧宫骶韧带离断, 因此经超声刀或双极阻断血运后于宫旁约3 cm处进行双极电凝离断, 剖开前后穹隆并切除子宫; 闭合阴道残端, 清洗腹腔, 常规放置引流管, 撤出手术器械, 闭合腹腔。对照组联合采用开腹广泛子宫切除术及盆腔淋巴结清扫术, 于腹部行切口实施手术, 除未应用腹腔镜, 其余手术操作同研究组。术后随访3~6个月。

1.3 观察指标

1) 统计对比两组手术情况(手术时长、术中

失血量、淋巴结清扫数目)。2) 统计对比两组术后康复情况(肛门排气时间、肛门排便时间、拔管时间、抗生素应用时间、住院时间)。3) 统计对比两组入院时及术后3, 6个月生活质量评分, 依据FACT-G量表予以评估, 分值范围为0~100分, 分值越高生活质量越好^[7]。4) 统计对比随访期间两组并发症发生率。

1.4 统计学处理

通过SPSS 20.0对数据进行分析, 以均数±标准差($\bar{x} \pm s$)表示计量资料, 采用 t 检验; 以例(%)表示计数资料, 采用 χ^2 检验。 $P < 0.05$ 表示差异有统计学意义。

2 结果

2.1 两组手术情况比较

研究组手术时长较对照组长, 术中失血量较对照组少, 淋巴结清扫数目较对照组多, 差异有统计学意义($P < 0.05$, 表1)。

2.2 两组术后康复情况比较

研究组肛门排气时间、肛门排便时间、拔管时间、抗生素应用时间、住院时间较对照组少, 差异有统计学意义($P < 0.05$, 表2)。

2.3 两组手术前后 FACT-G 分值比较

术前两组FACT-G分值比较, 差异无统计学意义($P > 0.05$), 术后3, 6个月研究组FACT-G分值较对照组高, 差异有统计学意义($P < 0.05$, 表3)。

2.4 两组并发症发生率比较

研究组并发症发生率(5.41%)较对照组(24.32%)低, 差异有统计学意义($P < 0.05$, 表4)。

表1 两组手术情况比较($n=37, \bar{x} \pm s$)

Table 1 Comparison of operation between the two groups ($n=37, \bar{x} \pm s$)

| 组别 | 手术时长/min | 术中失血量/mL | 淋巴结清扫数目/枚 |
|-----|----------------|----------------|--------------|
| 研究组 | 221.08 ± 47.01 | 158.13 ± 10.48 | 21.43 ± 3.98 |
| 对照组 | 196.12 ± 46.83 | 316.24 ± 12.10 | 16.68 ± 3.69 |
| t | 2.288 | 60.081 | 5.324 |
| P | 0.025 | <0.001 | <0.001 |

表2 两组术后康复情况比较($n=37, \bar{x} \pm s$)Table 2 Comparison of postoperative rehabilitation between the two groups ($n=37, \bar{x} \pm s$)

| 组别 | 肛门排气时间/d | 肛门排便时间/d | 拔管时间/d | 抗生素应用时间/d | 住院时间/d |
|----------|-------------|-------------|-------------|-------------|--------------|
| 研究组 | 2.05 ± 0.34 | 3.15 ± 0.74 | 3.03 ± 0.46 | 3.11 ± 0.35 | 15.27 ± 3.60 |
| 对照组 | 3.57 ± 0.61 | 4.23 ± 0.98 | 4.46 ± 0.57 | 6.27 ± 1.03 | 18.48 ± 5.27 |
| <i>t</i> | 13.239 | 5.350 | 11.876 | 17.669 | 3.059 |
| <i>P</i> | <0.001 | <0.001 | <0.001 | <0.001 | 0.003 |

表3 两组手术前后FACT-G分值比较($n=37, \bar{x} \pm s$)Table 3 Comparison of FACT-G scores between the two groups before and after operation ($n=37, \bar{x} \pm s$)

| 组别 | 术前 | 术后3个月 | 术后6个月 |
|----------|--------------|--------------|--------------|
| 研究组 | 48.44 ± 5.15 | 70.78 ± 7.01 | 82.63 ± 7.14 |
| 对照组 | 49.03 ± 5.01 | 61.32 ± 6.27 | 70.89 ± 6.85 |
| <i>t</i> | 0.500 | 6.118 | 7.217 |
| <i>P</i> | 0.619 | <0.001 | <0.001 |

表4 两组并发症发生率比较($n=37$)Table 4 Comparison of complication rates between the two groups ($n=37$)

| 组别 | 输尿管损伤/[例(%)] | 感染/[例(%)] | 尿潴留/[例(%)] | 肠梗阻/[例(%)] | 总发生率/% |
|----------|--------------|-----------|------------|------------|--------|
| 研究组 | 1 (2.70) | 1 (2.70) | 0 (0.00) | 0 (0.00) | 5.41 |
| 对照组 | 2 (5.41) | 4 (10.81) | 2 (5.41) | 1 (2.70) | 24.32 |
| χ^2 | — | — | — | — | 15.362 |
| <i>P</i> | — | — | — | — | 0.004 |

3 讨论

宫颈癌发病率在女性恶性肿瘤中仅低于乳腺癌,患者多伴有下肢肿痛、尿急、尿频、白带恶臭、阴道排液、阴道不规则出血等症状,对患者身心健康及生活质量造成了极大威胁。国外相关统计资料^[8]表明:世界范围内每年宫颈癌新发病例可达46.5万人,而病死人数多达20万左右。随着宫颈癌发病率及病死率不断增高,如何对其进行早期有效治疗越来越得到临床广泛重视。

外科手术为临床治疗早期宫颈癌的重要措施,主要为广泛子宫切除术及盆腔淋巴结清扫术,但传统开腹术式创伤较大、术中失血量较多,对术后机体功能康复造成了不利影响^[9-10]。Zakashansky等^[11]研究显示:自Nezhat及Reich等

学者于1990年首次通过盆腔及腹主动脉旁淋巴结清除术治疗宫颈癌与子宫内膜癌等疾病,并辅以子宫切除术以来,腹腔镜下广泛子宫切除术与盆腔淋巴结清扫术以创伤小、疗效确切、安全性高、术后机体功能康复快等优势逐渐成为早期宫颈癌重要治疗措施。随着腹腔镜术式在宫颈癌治疗中不断得到普及,临床多项研究总结其具备如下优势:1)经腹壁4个穿刺点实施手术操作,无需进行腹壁全层切割,可避免损伤腹壁血管神经及肌肉,利于保护腹壁完整性及功能,且不会遗留明显疤痕,具有良好美观效果;2)术中取膀胱截石位,略微垫高下肢,可借助重力作用使盆腔肠管向腹腔自动移动,增大盆腔空间,利于实施操作;3)置入腹腔镜全面探查盆腔与腹腔脏器,可准确掌握肠、胃肠、膈肌、胆、肝等脏器表层

与子宫及其附件形态、大小、活动度及有无病灶转移等；4)腹腔镜可有效显露盆腔隐蔽区域，并放大局部组织结构，且能在术中参照手术情况对镜身予以调整^[12-14]。本研究中，研究组术中失血量、淋巴结清扫数目、术后机体功能康复情况优于对照组，表明通过腹腔镜下广泛子宫切除术及盆腔淋巴结清扫术治疗早期宫颈癌患者可减少手术创伤，促使患者术后及早康复，分析其主要原因在于：1)腹腔镜辅助下实施手术，利于术者辨别盆腔血管与分支走行，更彻底分离血管，并通过相关器械实施凝切、电凝等操作，提高止血效果；2)经腹腔镜辅助，可清晰查看盆腔隐蔽区域情况，利于彻底清除淋巴结，改善手术疗效。同时，翟振波等^[15]及蒋镌等^[16]的研究表明：气腹压力值维持于约13 mmHg(1 mmHg=0.133 kPa)，可促使毛细血管自动闭合，减少创面渗血量，以此减少手术失血量。此外，腹腔镜术式操作环境相对封闭，可减少对盆腹腔脏器造成的干扰，利于患者术后及早进食、下床活动，可有效降低开腹手术所致盆腹腔脏器粘连等发生风险，且对术后接受进一步治疗不会产生不利影响。

本研究发现研究组FACT-G分值及并发症发生率较对照组低，提示腹腔镜下广泛子宫切除术及盆腔淋巴结清扫术不仅能在早期宫颈癌临床治疗中取得良好效果，且能在一定程度上降低疾病复发风险，减少术后并发症，改善患者生活质量，与既往相关学者^[17-18]研究结果具有一致性。Salicrú等^[19]研究认为：腹腔镜术式可清晰显露生殖股神经、闭孔神经、支配阴道与直肠、膀胱等的盆腔自主神经，以此降低神经副损伤发生风险，最大程度对神经功能予以保留，降低术后并发症发生率。此外，国内部分学者研究^[20-21]还指出：腹腔镜术式虽能在早期宫颈癌临床治疗中取得良好效果，但其对术中操作技术要求较高，需具备娴熟腹腔镜术式操作技巧，并掌握恶性肿瘤手术原则。同时，术者还应具备处理术中并发症能力及丰富开腹手术经验，避免遇到突发并发症时无法及时采取有效处理措施或发生紧急情况时难以立即进行开腹手术。

综上所述，联合采用腹腔镜下广泛子宫切除术及盆腔淋巴结清扫术治疗早期宫颈癌效果显著，可有效减少手术创伤，促使术后机体功能康复，改善患者生活质量，且并发症较少，但本研究样本量选取较少、随访观察时间较短，因此腹腔镜下广泛子宫切除术及盆腔淋巴结清扫术对早期宫颈癌患者远期预后效果的影响，仍需临床延

长随访观察时间进一步探究证实。

参考文献

- 于森森, 杨露, 张艳梅, 等. 腹腔镜子宫切除术对宫颈癌患者近期疗效及远期复发率的影响[J]. 现代生物医学进展, 2016, 16(20): 3863-3865.
YU Miaomiao, YANG Lu, ZHANG Yanmei, et al. Curative effect and long-term recurrence and survival rate of laparoscopic radical tumor resection for patients with cervical cancer[J]. Progress in Modern Biomedicine, 2016, 16(20): 3863-3865.
- Yan X, Li G, Shang H, et al. Twelve-year experience with laparoscopic radical hysterectomy and pelvic lymphadenectomy in cervical cancer[J]. Gynecol Oncol, 2011, 120(3): 362-367.
- 王凤娣, 杨慧云. 宫颈癌腹腔镜下根治术与开腹手术的临床效果比较[J]. 江苏医药, 2014, 40(22): 2781-2782.
WANG Fengdi, YANG Huiyun. Comparison of clinical effects between laparoscopic radical resection and open surgery for cervical cancer[J]. Jiangsu Medical Journal, 2014, 40(22): 2781-2782.
- 袁涛, 吴晓梅. 早期宫颈癌患者不同手术方法治疗及其预后临床研究[J]. 中国妇幼保健, 2014, 29(10): 1519-1521.
YUAN Tao, WU Xiaomei. Clinical study of different surgical methods and prognosis of early cervical cancer patients[J]. Maternal and Child Health Care of China, 2014, 29(10): 1519-1521.
- Ghezzi F, Cromi A, Uccella S, et al. Nerve-sparing minilaparoscopic versus conventional laparoscopic radical hysterectomy plus systematic pelvic lymphadenectomy in cervical cancer patients[J]. Surg Innov, 2013, 20(5): 493-493.
- 中华人民共和国国家卫生和计划生育委员会. 宫颈癌及癌前病变规范化诊疗指南(试行)[J]. 中国医学前沿杂志(电子版), 2013, 5(6): 401-410.
National Health and Family Planning Commission, People's Republic of China. Guidelines for standardized diagnosis and treatment of cervical cancer and precancerous lesions (trial)[J]. Chinese Journal of the Frontiers of Medical Science. Electronic Version, 2013, 5(6): 401-410.
- 朱静芳. 老年宫颈癌患者行腹腔镜下广泛子宫切除联合盆腔淋巴结清扫术的临床效果观察[J]. 实用癌症杂志, 2016, 31(11): 1822-1824.
ZHU Jingfang. Clinical efficacy of laparoscopic radical hysterectomy combined with pelvic lymphadenectomy for elderly patients with cervical cancer[J]. The Practical Journal of Cancer, 2016, 31(11): 1822-1824.
- Zygouris D, Kotsopoulos IC, Chalvatzas N, et al. Laparoscopic para-aortic and pelvic lymphadenectomy and radical hysterectomy in a patient with cervical cancer, six months after primary

- chemoradiation[J]. *Eur J Gynaecol Oncol*, 2013, 34(5): 484-486.
9. 谈宗国. 腹腔镜广泛子宫切除联合盆腔淋巴结切除术治疗子宫颈癌的疗效分析[J]. *实用癌症杂志*, 2016, 31(9): 1487-1489.
TAN Zongguo. Clinical efficacy of laparoscopic hysterectomy and pelvic lymph node dissection in the treatment of cervical cancer[J]. *The Practical Journal of Cancer*, 2016, 31(9): 1487-1489.
 10. 李丽, 董晶. 腹腔镜下广泛子宫切除联合盆腔淋巴结清扫术治疗子宫颈癌的疗效[J]. *中国老年学杂志*, 2014, 34(20): 5746-5748.
LI Li, DONG Jing. Laparoscopic extensive hysterectomy combined with pelvic lymph node dissection in the treatment of cervical cancer[J]. *Chinese Journal of Gerontology*, 2014, 34(20): 5746-5748.
 11. Zakashansky K, Chuang L, Gretz H, et al. A case-controlled study of total laparoscopic radical hysterectomy with pelvic lymphadenectomy versus radical abdominal hysterectomy in a fellowship training program[J]. *Int J Gynecol Cancer*, 2007, 17(5): 1075-1082.
 12. 谢晓华, 夏雅仙, 周欢珍. 老年女性早期宫颈癌手术治疗的方式[J]. *中国老年学杂志*, 2015, 35(15): 4274-4277.
XIE Xiaohua, XIA Yaxian, ZHOU Huanzhen. Surgical treatment of early cervical cancer in elderly women[J]. *Chinese Journal of Gerontology*, 2015, 35(15): 4274-4277.
 13. 熊巍, 杨佳欣, 吴鸣, 等. 子宫颈癌腹腔镜与开腹下广泛性子宫切除及淋巴结清扫术的对比分析[J]. *生殖医学杂志*, 2013, 22(5): 307-311.
XIONG Wei, YANG Jiaxin, WU Ming, et al. Comparison of laparoscopic and open radical hysterectomy and pelvic lymphadenectomy in treatment of cervical cancer[J]. *Journal of Reproductive Medicine*, 2013, 22(5): 307-311.
 14. Torng PL, Pan SP, Hwang JS, et al. Learning curve in concurrent application of laparoscopic and robotic-assisted hysterectomy with lymphadenectomy in endometrial cancer[J]. *Taiwan J Obstet Gynecol*, 2017, 56(6): 781-787.
 15. 翟振波, 张秀珍, 宋丽, 等. 腹腔镜广泛子宫切除及盆腔淋巴结清扫术治疗早期宫颈癌183例临床分析[J]. *现代肿瘤医学*, 2013, 21(10): 2319-2321.
ZHAI Zhenbo, ZHANG Xiuzhen, SONG Li, et al. Clinical report of 183 cases undergoing laparoscopic radical hysterectomy and pelvic lymphadenectomy for early uterine cervix cancer[J]. *Journal of Modern Oncology*, 2013, 21(10): 2319-2321.
 16. 蒋钊, 毛世琴, 史淑兰, 等. 腹腔镜下广泛性全子宫切除术治疗早期宫颈癌的疗效观察[J]. *中国肿瘤临床与康复*, 2016, 23(9): 1091-1094.
JIANG Juan, MAO Shiqin, SHI Shulan, et al. Efficacy of laparoscopic radical hysterectomy for early-stage cervical carcinoma[J]. *Chinese Journal of Clinical Oncology and Rehabilitation*, 2016, 23(9): 1091-1094.
 17. 张丹丹, 黄顺彬, 宋化雨. 广泛宫颈切除术治疗宫颈癌的手术要点及临床疗效观察[J]. *癌症进展*, 2017, 15(4): 425-427.
ZHANG Dandan, HUANG Shunbin, SONG Huayu. The operation key points and clinical curative effect of radical trachelectomy in cervical cancer[J]. *Oncology Progress*, 2017, 15(4): 425-427.
 18. 陈光元, 黄平, 谢家滨, 等. 腹腔镜广泛子宫切除联合盆腔淋巴结清扫术治疗宫颈癌疗效观察[J]. *海南医学*, 2016, 27(6): 932-934.
CHEN Guangyuan, HUANG Ping, XIE Jiabin, et al. Effects of laparoscopic radical hysterectomy combined with pelvic lymph node dissection on cervical cancer[J]. *Hainan Medical Journal*, 2016, 27(6): 932-934.
 19. Salicrú S, Gil-Moreno A, Montero A, et al. Laparoscopic radical hysterectomy with pelvic lymphadenectomy in early invasive cervical cancer[J]. *J Minim Invasive Gynecol*, 2011, 18(5): 555-568.
 20. 李水云, 曾勇梅, 吴萍, 等. 腹腔镜下广泛子宫切除联合盆腔淋巴结清扫术治疗早期宫颈癌近期疗效观察[J]. *河北医学*, 2014, 20(7): 1086-1089.
LI Shuiyun, ZENG Yongmei, WU Ping, et al. Observation on the short-term effects of laparoscopic radical hysterectomy combined with pelvic lymph node dissection on early stage cervical cancer[J]. *Hebei Medicine*, 2014, 20(7): 1086-1089.
 21. 周树林, 袁琳, 傅士龙, 等. 腹腔镜下广泛子宫切除加盆腔淋巴结清扫术治疗60例宫颈癌[J]. *江苏医药*, 2013, 39(16): 1938-1940.
ZHOU Shulin, YUAN Lin, FU Shilong, et al. Laparoscopic extensive hysterectomy and pelvic lymph node dissection in the treatment of 60 cases of cervical cancer[J]. *Jiangsu Medical Journal*, 2013, 39(16): 1938-1940.

本文引用: 赵晓棠. 腹腔镜下广泛子宫切除术联合盆腔淋巴结清扫术对早期宫颈癌患者手术时长及术后康复的影响[J]. *临床与病理杂志*, 2018, 38(2): 288-293. doi: 10.3978/j.issn.2095-6959.2018.02.010

Cite this article as: ZHAO Xiaotang. Effect of laparoscopic extensive hysterectomy combined with pelvic lymph node dissection on operation duration and postoperative rehabilitation of patients with early cervical cancer[J]. *Journal of Clinical and Pathological Research*, 2018, 38(2): 288-293. doi: 10.3978/j.issn.2095-6959.2018.02.010