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保留盆腔自主神经的宫颈癌根治术对 Ib 期宫颈癌患者性生活质量及膀胱直肠功能的影响 *

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摘要 目的: 探讨保留盆腔自主神经的宫颈癌根治术对 Ib 期宫颈癌患者性生活质量及膀胱直肠功能的影响。**方法:** 选取我院于 2010 年 1 月~2017 年 1 月期间收治的 90 例 Ib 期宫颈癌患者为研究对象,按乱数表法分为对照组和观察组,每组患者各 45 例。对照组患者采用传统的宫颈癌根治术治疗,观察组采用保留盆腔自主神经的宫颈癌根治术治疗。比较两组患者的手术情况、性生活质量以及膀胱直肠功能。**结果:** 相比于对照组,观察组患者的手术时间较长,但住院时间较短($P<0.05$)。观察组术后残余尿量 $<100\text{ mL}$ 、 $<50\text{ mL}$ 的时间、肛门排气时间、排便时间与对照组比较均明显较短($P<0.05$)。术后观察组性生活质量各项评分低于对照组($P<0.05$)。观察组并发症发生率为 6.67%,明显低于对照组的 22.22%($P<0.05$)。**结论:** 保留盆腔自主神经的宫颈癌根治术治疗 Ib 期宫颈癌患者临床疗效显著,有利于患者术后膀胱直肠功能的快速恢复,对患者的性生活质量影响较小,且术后并发症较少。

关键词: 保留盆腔自主神经宫颈癌根治术;传统宫颈癌根治术;性生活质量;膀胱功能;直肠功能

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Effect of Radical Resection of Cervical Carcinoma with Pelvic Nerve on Quality of Sexual Life and Bladder Function and Rectal Function in Patients with Ib Stage Cervical Cancer*

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ABSTRACT Objective: To investigate the effect of radical resection of cervical cancer with pelvic nerve on the quality of sexual life and bladder function and rectal function in patients with Ib stage cervical cancer. **Methods:** A total of 90 patients with Ib stage cervical cancer who were treated in Panyu District Central Hospital of Guangzhou from January 2010 to January 2017, were selected and were randomly divided into control group ($n=45$) and observation group ($n=45$). The control group was treated with traditional radical resection of cervical cancer, and the observation group was treated with radical resection of cervical carcinoma with pelvic nerve. The operation condition, the quality of sexual life and the function of the bladder and rectum were compared between the two groups. **Results:** Compared with the control group, the operation time of the patients in the observation group was longer, but the time of hospitalization was shorter ($P<0.05$). The time of residual urine volume $<100\text{ mL}$ and $<50\text{ mL}$, anal exhaust time and defecation time in the observation group were shorter than those in the control group ($P<0.05$). The various scores of the quality of sexual life in the observation group after operation were lower than those in the control group, and the difference was statistically significant ($P<0.05$). The incidence of complications (6.67%) in the observation group was lower than that (22.22%) in the control group ($P<0.05$). **Conclusion:** The clinical efficacy of radical resection of cervical carcinoma with pelvic nerve in the treatment of patients with Ib stage cervical cancer is significant. It is conducive to the rapid recovery of bladder and rectum function after operation and has little influence on the quality of sexual life and fewer postoperative complications.

Key words: Radical resection of cervical carcinoma with pelvic nerve; Traditional radical resection of cervical cancer; Quality of sexual life; Bladder function; Rectal function

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前言

宫颈癌是妇科常见的恶性肿瘤疾病,好发于育龄期妇女,其死亡率较高^[1,2]。目前对于宫颈癌的治疗主要以手术切除根治

性治疗为主,可显著提高宫颈癌患者生存周期。传统宫颈癌根治切除术虽然可有效地切除宫颈处病灶,发挥较好的手术治疗效果,但是手术操作过程中对患者盆腔组织及神经组织的损伤性较大,由此引发术后患者膀胱、直肠功能下降,影响患者的性

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功能,从而影响患者的术后生活质量^[3-5]。因此,如何在不影响宫颈癌根治术切除效果的前提下,在术中减少对盆腔自主神经的损伤,以进一步提高患者的手术效果已成为当前临床的研究重点^[6,7]。随着研究的不断深入,临床对于宫颈癌手术治疗的认知不断深化,以及相关医疗设备和手术技术的不断提升,保留盆腔自主神经的宫颈癌根治术的应用也逐渐增多^[8,9]。本研究结合我院近些年的临床实践经验,选取 90 例 Ib 期宫颈癌患者实施保留盆腔自主神经的宫颈癌根治术,取得了满意的疗效,现作如下报道。

1 资料与方法

1.1 一般资料

选取 2010 年 1 月~2017 年 1 月期间我院收治的 90 例 Ib 期宫颈癌患者,纳入标准^[10]:① 患者经 CT、MRI 及组织病理学检查确诊为宫颈癌;② 根据国际妇产科联盟制定的临床分期标准诊断为 Ib 期^[7];③ 患者均能耐受本研究手术治疗方式,无手术禁忌症;④ 术前患者的膀胱、直肠及性功能均正常;⑤ 患者均签署知情同意书。排除标准:① 手术前已进行放化疗治疗者;② 伴严重心肝肾功能不全及凝血障碍者;③ 妊娠哺乳期妇女、精神状态异常者。按乱数表法随机均分为观察组和对照组,两组均为 45 例。两组患者的一般资料比较无统计学差异 ($P>0.05$),见表 1。研究方案经医院伦理学委员会批准。

表 1 两组一般基础资料比较
Table 1 Comparison of general basic data of two groups

Groups	n	Age (years)	Course of disease (months)	Stages		Types		
				Ib1	Ib2	Adenocarcinoma	Squamous cell carcinoma	Small cell carcinoma
Observation group	45	39.98± 6.37	13.27± 4.72	23	22	13	18	14
Control group	45	41.34± 7.54	14.18± 4.65	25	20	10	22	13
t/ χ^2	-	0.924	1.327		0.179			0.828
P	-	0.358	0.188		0.673			0.661

1.2 治疗方法

对照组患者采用传统的宫颈癌根治术治疗,患者完成术前各项检查,进行全身静脉麻醉,取截石位,完成穿刺后,采用 CO₂ 建立气腹,气腹压力为 10~14 mmHg,然后将套管针、手术器械经穿刺孔置入腹腔内,在腹腔镜引导下进行盆腔淋巴结清扫和子宫切除。观察组采用保留盆腔自主神经的宫颈癌根治术治疗,患者完成术前各项检查,进行全身静脉麻醉,取截石位,首先将患者盆腔中支配膀胱、直肠、子宫等功能的膀胱神经丛、直肠丛、阴道丛、子宫丛等神经分离出来,将患者骶岬处的左右腹下神经分离,然后进行盆腔处的淋巴结清扫。将患者的骶韧带外侧的输尿管分离,并保留腹下神经丛,切断骶韧带。分离子宫深静脉、膀胱静脉后将子宫动脉切断。将患者子宫深静脉和膀胱静脉的头部提起,找出盆丛神经,将其中的膀胱支、直肠支、子宫支、阴道支神经进行保留,并将子宫支切断,然后将子宫主韧带、膀胱韧带以及阴道旁组织切断,最后切除子宫。

1.3 评价指标

记录两组患者术中出血量、住院时间、淋巴结清扫个数、手术时间。比较两组患者术后的膀胱功能、直肠功能,膀胱功能指

标包括术后残余尿量 <100 mL 时间、残余尿量 <50 mL 时间,直肠功能指标包括肛门排气时间、术后排便时间。采用自制《宫颈癌术后患者性生活质量调查表》对两组患者术前、术后 6 个月的性生活质量进行评价,该量表共分为 6 个项目,包括配偶间关系、性关系、性欲、性交、性高潮、性困难 6 项,得分越低表明患者的性生活质量越好。观察两组患者术后并发症发生情况。

1.4 统计学方法

采用 SPSS 20.0 处理数据,手术指标、性生活质量评分等计量资料用($\bar{x} \pm s$)表示,采用 t 检验,临床分期、病理分型等计数资料用[n(%)]表示,采用 χ^2 检验,将 $\alpha=0.05$ 作为检验标准。

2 结果

2.1 两组患者手术情况比较

相比于对照组,观察组患者的手术时间较长,但住院时间较短($P<0.05$)。两组的术中出血量、淋巴结清扫个数无统计学差异($P>0.05$),见表 2。

表 2 两组患者手术情况比较($\bar{x} \pm s$)
Table 2 Comparison of operation condition of patients in two groups ($\bar{x} \pm s$)

Groups	n	Intraoperative bleeding (mL)	Time of hospitalization (d)	Number of lymph node dissection (number)	Operation time (min)
Observation group	45	329.78± 68.92	15.78± 3.65	21.38± 5.87	210.45± 31.38
Control group	45	313.71± 70.56	19.39± 4.02	20.24± 5.47	180.23± 23.67
t	-	1.093	4.460	0.953	5.158
P	-	0.277	0.000	0.343	0.000

2.2 两组患者术后膀胱、直肠功能比较

时间、排便时间与对照组比较均明显较短($P<0.05$)。见表 3。

观察组术后残余尿量 $<100\text{ mL}$ 、 $<50\text{ mL}$ 的时间、肛门排气

表 3 两组患者术后膀胱、直肠功能比较($\bar{x}\pm s$)

Table 3 Comparison of bladder and rectal function of patients in two groups after operation($\bar{x}\pm s$)

Groups	n	Bladder function		Rectal function	
		Time of residual urine volume $<100\text{ mL}$ after operation(d)	Time of residual urine volume $<50\text{ mL}$ after operation(d)	Anus exhaust time after operation(h)	Defecation time after operation(h)
Observation group	45	8.31 $\pm$ 2.09	12.35 $\pm$ 3.36	48.92 $\pm$ 10.23	73.28 $\pm$ 15.45
Control group	45	11.49 $\pm$ 2.68	15.72 $\pm$ 4.42	59.96 $\pm$ 14.37	87.23 $\pm$ 17.12
t	-	6.277	4.072	4.198	4.058
P	-	0.000	0.000	0.000	0.000

2.3 两组患者性生活质量评分比较

组配偶间关系、性关系、性欲、性交、性高潮、性困难等 6 项评分

两组患者术前性生活质量各项评分比较无统计学差异($P>0.05$),术后两组患者的性生活质量各项评分均有所升高,观察

低于对照组,差异有统计学意义($P<0.05$),见表 4。

表 4 两组患者性生活质量评分比较($\bar{x}\pm s$, 分)

Table 4 Comparison of sexual quality of life scores of patients in two groups ($\bar{x}\pm s$, scores)

Groups	Time	Spousal relationship	Sexual relationship	Sexual desire	Sexual intercourse	Orgasm	Sexual difficulty
Observation group	Before operation	9.32 $\pm$ 2.01	10.98 $\pm$ 2.35	8.82 $\pm$ 1.78	9.54 $\pm$ 1.01	10.35 $\pm$ 2.42	11.09 $\pm$ 2.11
	After operation	11.98 $\pm$ 1.97 [#]	13.56 $\pm$ 2.67 [#]	10.62 $\pm$ 2.12 [#]	12.34 $\pm$ 2.93 [#]	13.98 $\pm$ 2.97 [#]	14.58 $\pm$ 2.94 [#]
Control group	Before operation	9.10 $\pm$ 1.92	10.40 $\pm$ 2.12	9.01 $\pm$ 1.85	9.69 $\pm$ 1.52	10.18 $\pm$ 2.52	11.50 $\pm$ 2.57
	After operation	15.72 $\pm$ 3.27 [*]	17.71 $\pm$ 4.27 [*]	13.79 $\pm$ 2.27 [*]	16.74 $\pm$ 3.56 [*]	16.89 $\pm$ 3.47 [*]	18.79 $\pm$ 3.09 [*]
t	-	5.572	5.528	6.846	6.402	4.274	6.621
P	-	0.000	0.000	0.000	0.000	0.000	0.000

Note: compared with before operation, $*P<0.05$, compared with the control group, $^{\#}P<0.05$.

表 5 两组患者并发症发生率比较[n(%)]

Table 5 Comparison of the incidence of complications in two groups [n (%)]

Groups	n	Incisional infection	Urinary tract infection	Nerve injury	Urinary incontinence	Total incidence
Observation group	45	1(2.22)	1(2.22)	0(0.00)	1(2.22)	3(6.67)
Control group	45	2(4.44)	2(4.44)	4(8.89)	2(4.44)	10(22.22)
χ^2						4.406
P						0.036

2.4 两组患者并发症发生率比较

观察组并发症发生率为 6.67%,明显低于对照组的 22.22% ($P<0.05$),见表 5。

3 讨论

手术切除是治疗宫颈癌最为有效的治疗方式,可以延长患者的生命周期,其中 III 型宫颈癌根治术是治疗早期宫颈癌的标准治疗方法^[11-13]。该治疗方法具有切除范围广、淋巴结清扫彻底、肿瘤复发率低等优点,但是不足之处在于盆腔部位的广泛

性切除对盆腔处的组织有损伤,特别是对盆腔各自主神经的损伤尤为突出,而盆腔处是直肠、膀胱、子宫、阴道等神经丛交汇密集之处,手术操作过程中极易造成对此类神经的损伤,由此引起患者术后直肠功能、膀胱功能及性功能质量的下降,对患者的手术效果及术后生活质量产生严重影响^[14-16]。为了改善传统宫颈癌根治术的不足,临床上进行了大量的深入研究,主要手段包括减少盆腔内的淋巴结清扫范围或者保留患者盆腔内的自主神经丛。由于减少淋巴结清扫范围可能引起肿瘤病灶的切除不彻底,造成患者易在短时间内复发,使得患者手术治疗

的效果大为降低^[17-19],因此本次研究分析保留盆腔自主神经的宫颈癌根治术的临床治疗效果。

本研究结果显示,与对照组比较,观察组患者的手术时间明显较长,而住院时间较短、术后并发症发生率较低($P<0.05$),说明观察组的治疗效果优于对照组,这是因为观察组保留盆腔自主神经后清扫淋巴结的过程中需要先对各神经丛进行查找并予以分离^[20-22],而对照组则只需进行盆腔淋巴结清扫,操作时无需刻意对自主神经进行查找保留,因此,观察组患者的手术时间稍长于对照组。由于观察组患者在术中对于盆腔处的自主神经给予保留,而对照组患者的术式会造成神经功能和盆腔各组织的损伤,导致对照组术后并发症发生率较高,患者术后住院时间也相应增加。观察组术后残余尿量 $<100\text{ mL}$ 、 $<50\text{ mL}$ 的时间、肛门排气时间、排便时间均短于对照组患者,且术后观察组患者的性生活质量各项评分均优于对照组($P<0.05$)。这是因为盆腔内汇集有支配膀胱、直肠、阴道、子宫等神经丛,这些神经系统的存在对患者的排便、排尿、排气、性功能的传导等发挥着重要作用^[23-25]。传统宫颈癌根治术在盆腔处进行大范围的清扫切除,难免会对这些神经节造成损伤,影响神经兴奋的传导,对各神经支配的组织器官的功能的发挥造成不良影响,使得患者膀胱功能受损出现排尿困难、直肠括约肌功能受损出现排便困难,性兴奋传导受阻导致患者的性生活质量下降^[26-28]。而观察组在手术过程中通过对盆腔自主神经丛的保留,可避免对盆腔内各自主神经的损伤,减少对患者术后排便、排尿、排气、性功能的影响,并且降低术后对其他脏器功能的影响^[29,30]。

综上所述,与传统宫颈癌根治术相比,保留盆腔自主神经的宫颈癌根治术治疗 Ib 期宫颈癌有利于患者术后膀胱、直肠功能的快速恢复,对患者的性功能质量影响较小,手术安全性好,值得临床推广。

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