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全子宫切除术后盆腔肿块的发生因素调查分析*

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摘要 目的:调查与探讨全子宫切除术后患者出现盆腔肿块的发生因素。**方法:**2017年9月至2019年3月选择在北部战区总医院(本院)进行择期全子宫切除术的女性患者178例,所有患者都给予全子宫切除术,患者取膀胱截石位,选用连续硬膜外麻醉或静脉复合麻醉,宫颈扩张棒扩张宫颈口,切除病灶部位。记录所有患者的一般资料(包括疾病类型、孕次、产次、年龄、体重指数等)与围手术期指标(包括手术时间、术中出血量、术后排气时间、术后住院时间),以及术后并发症发生情况;在术后6个月进行经阴道超声观察,判断患者术后盆腔肿块发生情况并进行调查分析。**结果:**术后随访6个月,178例患者中发生盆腔肿块14例,发生率为7.9%。发生其他并发症17例,其中切口感染4例,淋巴囊肿6例,尿潴留5例,下肢静脉血栓2例。在178例患者中,不同手术时间、术中出血量、孕次、产次、年龄、疾病类型患者的盆部肿块发生率对比差异有统计学意义($P<0.05$)。以单因素分析中有统计学意义的指标作为自变量,以盆腔肿块作为因变量,Logistic回归分析显示手术时间、孕次、产次、疾病类型等为导致盆腔肿块发生的主要因素($P<0.05$)。**结论:**女性全子宫切除术后患者盆腔肿块比较常见,手术时间、孕次、产次、疾病类型等为导致盆腔肿块发生的主要因素。

关键词:女性;全子宫切除术;盆腔肿块;宫颈癌;手术时间

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Investigation and Analysis of Pelvic Masses after Total Hysterectomy*

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ABSTRACT Objective: To investigate and explore the causes of pelvic mass after total hysterectomy. **Methods:** From September 2017 to March 2019, 178 female patients who chose elective total hysterectomy in the Northern Theater General Hospital (our hospital). All patients were given a total hysterectomy. Record general information of all patients (including disease type, pregnancy, parity, age, body mass index) and perioperative indicators (including operation time, intraoperative blood loss, postoperative exhaust time, postoperative hospital stay). And the occurrence of postoperative complications. Guided ultrasound observation was performed at 6 months after operation to determine the occurrence of pelvic masses in patients and to investigate and analyze them. **Results:** After 6 months of followed-up, there were 14 cases of pelvic masses occurred in the 178 patients that the incidence rates was 7.9%. Other complications occurred in 17 cases, including incision infection in 4 cases, lymph cysts in 6 cases, urinary retention in 5 cases, and lower limb venous thrombosis in 2 cases. Among the 178 patients, there was a significant difference in the incidences of pelvic edema in patients with different operation time, intraoperative blood loss, pregnancy, parity, age, and disease type ($P<0.05$). Taking statistically significant indicators in the single factor analysis as independent variables and pelvic masses as dependent variables, Logistic regression analysis showed that operation time, pregnancy, parity, and disease type were the main factors led to the occurrence of pelvic masses ($P<0.05$). **Conclusion:** Pelvic masses are more common in female patients after total hysterectomy. Operation time, pregnancy, parity, and disease type are the main factors that cause pelvic masses.

Key words: Female; Total hysterectomy; Pelvic mass; Cervical cancer; Operation time

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前言

子宫切除术是治疗女性妇科重大疾病的重要方法,是为挽救女性生命而采取的一种必要的治疗手段,虽然该方法能够延长患者的生存时间,但是可严重影响患者的生理及心理健康^[1,2]。子宫是女性的重要器官和标志,失去子宫意味着丧失生育能

力,也可导致机体其他疾病的发生,比如卵巢功能紊乱和卵巢早衰等^[3,4]。全子宫切除术可导致盆底结构支持能力下降,盆底肌力下降,从而造成盆腔肿块,在临床上主要表现为压力性尿失禁、慢性盆腔疼痛等^[5-7]。盆部是由盆腔腹膜包绕的部分及盆腔腹膜外的部分所构成,盆腔肿块起病隐匿、早期症状体征不明显^[8]。盆腔肿块在早期主要表现为淋漓不尽、经期延长,少部

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分病例无明显症状,但是已具有恶性化趋势^[9,10],为此早期诊断与评估预测该病的发生具有重要价值。不过盆腔肿块的发生与发展为一个复杂的生理过程,也是多因素共同作用的结果,盆底结构缺陷、损伤或功能异常和体内激素分泌异常为主要的诱因^[11-13]。本文调查分析了全子宫切除术后盆腔肿块的发生因素,以有助于促进患者早期预防诊疗盆腔肿块的发生。现总结报告如下。

1 资料与方法

1.1 研究对象

本研究得到了本院伦理委员会的批准,采用回顾性资料分析方法。2017年9月至2019年3月选择在本院进行择期全子宫切除术的女性患者178例,纳入标准:年龄20-70岁,具有全子宫切除术指征;患者已签署了知情同意书;临床资料完整。排除标准:有自身免疫、神经系统严重疾病患者;有精神病史患者;存在血液传染性疾病患者;临床资料缺乏者;有盆腔手术史患者。

1.2 手术方法

所有患者都给予全子宫切除术,患者取膀胱截石位,选用连续硬膜外麻醉或静脉复合麻醉,宫颈扩张棒扩张宫颈口,切除病灶部位。

1.3 调查内容

(1)记录所有患者的一般资料与围手术期指标,一般资料包括疾病类型、孕次、产次、年龄、体重指数等,围手术期指标包括手术时间、术中出血量、术后排气时间、术后住院时间与术后并发症发生情况。(2)在术后6个月进行经阴道超声观察,患者排

空膀胱,仰卧呈截石位,呼气后屏住呼吸,超声(美国飞利浦公司)探头套避孕套防护,进入阴道深度为3~4 cm,调整探头位置以清楚显示病灶部位,由影像科两位副主任及其以上级别职称医师判定盆腔肿块发生情况。

1.4 统计方法

应用SPSS 19.00,计数资料用频数和率来表示,计量资料用均数±标准差表示,对比方法为卡方 χ^2 分析与t检验,影响因素分析采用多因素logistic逐步回归分析, $P<0.05$ 有统计学意义。

2 结果

2.1 一般资料

在178例患者中,宫颈癌104例,产后出血40例,其他34例;平均年龄 45.62 ± 2.19 岁, ≥ 50 岁65例;平均孕次 2.04 ± 0.09 次, ≥ 2 次89例;平均产次 1.84 ± 0.13 次, ≥ 2 次45例;平均手术时间 168.29 ± 12.48 min, ≥ 160 min 80例;平均体重指数 23.56 ± 1.09 kg/m²;平均术后排气时间 2.42 ± 0.14 d;平均术后住院时间 8.92 ± 0.22 d。

2.2 盆腔肿块发生情况

术后随访6个月,178例患者中发生盆腔肿块14例,发生率为7.9%。发生其他并发症17例,其中切口感染4例,淋巴囊肿6例,尿潴留5例,下肢静脉血栓2例。

2.3 单因素分析

在178例患者中,不同手术时间、术中出血量、孕次、产次、年龄、疾病类型患者的盆部肿块发生率对比差异有统计学意义($P<0.05$)。见表1。

表1 女性全子宫切除术后患者盆腔肿块发生的单因素分析

Table 1 Univariate analysis of pelvic masses in female patients after total hysterectomy

Index	n=178	Pelvic mass (n=14)	χ^2	P
Type of disease - cervical cancer	104	2 (1.9)	12.189	0.000
Postpartum hemorrhage/other	74	12 (16.2)		
Operation time- ≥ 160 min	80	10 (12.5)	4.307	0.038
<160 min	98	4 (4.1)		
Intraoperative bleeding - ≥ 180 mL	86	12 (14.0)	8.389	0.004
<180 mL	91	2 (2.2)		
Gravidity - ≥ 2	89	13 (14.6)	11.164	0.001
<2	89	1 (1.1)		
Parity - ≥ 2	45	12 (26.7)	29.379	0.000
<2	133	2 (1.5)		
Age- ≥ 50	65	11 (16.9)	11.593	0.001
<50	113	3 (2.7)		

2.4 多因素分析

以单因素分析中有统计学意义的指标作为自变量,以盆腔肿块作为因变量,Logistic回归分析显示手术时间、孕次、产次、疾病类型等为导致盆腔肿块发生的主要因素($P<0.05$)。见表2与表3。

3 讨论

由于环境的变化、人们工作压力过大以及生活方式不规律等因素的影响,导致当前宫颈癌术后出血的发病率明显升高^[14]。全子宫切除术为该病的主要治疗方法,能延长患者的生存时

表 2 女性全子宫切除术后患者盆腔肿块发生的多因素分析(n=178)

Table 2 Multivariate analysis of pelvic masses in female patients after total hysterectomy (n=178)

Factor	β	Wald	P	OR	95%CI
Operation time	3.772	78.093	0.000	27.103	9.881-30.892
Gravidity	2.673	56.094	0.000	21.583	10.784-40.861
Parity	1.356	20.334	0.000	3.488	1.773-18.774
Type of disease	1.265	14.566	0.000	1.983	1.302-3.775

表 3 赋值情况

Table 3 Assignment

Factor	Assignment
Operation time	$\geq 160 \text{ min}=0, <160 \text{ min}=1$
Gravidity	$\geq 2=0, <2=1$
Parity	$\geq 2=0, <2=1$
Type of disease	Cervical carcinoma =0, Postpartum hemorrhage/other=1

间,但是在术后也伴随有一定的并发症^[15]。比如在手术过程中可能对机体盆腔植物神经产生破损,诱发术后出现盆腔肿块等情况^[16]。

盆腔肿块是女性生殖系统疾病的主要类型之一,虽然不会直接威胁患者生命,但严重影响患者的健康及生活质量^[17]。本研究显示术后随访 6 个月,178 例患者中发生盆腔肿块 14 例,发生率为 7.9%。从机制上分析,全子宫切除术在切除宫颈的同时,也会损伤以致切断位于盆底中心位置的子宫主韧带和骶韧带,改变盆底整体结构与生理状态,易诱发盆腔肿块的发生^[18]。

子宫是女性的重要器官和标志,成熟女性的子宫能孕育胎儿^[19,20]。失去子宫意味着孕产妇丧失生育能力,预示着甾体激素受体的丧失,也会导致相关疾病或症状的发生率增加,严重影响女性的身心健康^[21,22]。盆底是承托和支持女性盆腔脏器、参与多项生理活动的重要组织器官。盆腔肿块发生的核心是盆底肌肉损伤及结缔组织松弛,导致盆底支持薄弱,内外在原因引起的盆底肌肉张力减退、强度下降是该病的主要病因^[23]。全子宫切除术在手术操作中需切断圆韧带、子宫阔韧带、宫体,可造成筋膜、肌肉、结缔组织和韧带等盆底支持结构异常、神经组织损伤,均可能影响盆底功能,诱发行成盆腔肿块^[24,25]。本研究显示不同手术时间、术中出血量、孕次、产次、年龄、疾病类型患者的盆部肿块发生率对比差异有统计学意义;Logistic 回归分析显示手术时间、孕次、产次、疾病类型等为导致盆腔肿块发生的主要因素。从机制上分析,手术时间过长与伴随有宫颈癌,可在手术中严重耗损患者的体力,会造成局部缺血、神经肌肉组织损伤等而损害其盆底功能,最终导致形成盆腔肿块发生^[26,27]。多次产次与孕次易导致盆底肌纤维断裂,使得盆底肌纤维内部结构会发生改变,尤其是过度的牵拉变形可严重损害盆底功能而发生盆腔肿块^[28,29]。特别是剖宫产等会牵拉甚至压迫会阴、肛提肌等,对盆底结缔组织、盆底肌组织等造成一定的损伤,导致女性盆底功能下降,从而增加术后盆腔肿块的发生风险^[30,31]。国内学者陈英^[32]与本研究的結果相似,通过对全子宫切除术患者术后并发症发生的相关因素调查,发现患者术后并发症的相关临床

因素为盆腔手术史、术前贫血、手术时间、术中失血量及子宫体积,回归分析结果显示,手术时间 $\geq 2 \text{ h}$ 、术前贫血是导致患者术后相关并发症发生的独立风险因素,与本研究不同的对术后发生常见并发症均进行了风险因素分析,发现盆腔手术史、术前贫血、手术时间、术中失血量及子宫体积均会对常见术后的并发症产生影响。国外学者 Massimo^[33]对并发症(手术部位感染,出血,肠损伤和盆腔包块)也进行了分析,影响因素分析与本研究相似,通过分析提高了放射科医生对子宫切除术后正常发现和手术后并发症的熟悉程度。本研究的创新点在于以往的研究对全子宫切除术后患者并发症主要集中在手术部位的感染和出血等,本研究主要是关注了术后短时间内出现的盆腔肿块,并对其产生的原因进行的分析,取得了一定的结果,为以后全子宫切除术提供了有利的帮助,能够提前预测术后可能会出现盆腔肿块的患者,对其采取有利的措施,减少术后盆腔肿块的产生,有助于提高治疗效率,减少对患者身体的再次伤害。不过由于时间与经费的限制,本次调查人数比较少,且随访时间比较短,将在后续研究中深入分析。

总之,女性全子宫切除术后患者盆腔肿块比较常见,手术时间、孕次、产次、疾病类型等为导致盆腔肿块发生的主要因素。

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