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加速康复外科理念在根治性子宫切除术患者中的应用研究 *

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摘要 目的:探讨加速康复外科理念对行根治性子宫切除术的宫颈癌患者的围手术期应用价值。**方法:**选取 2013 年 1 月至 2018 年 7 月在我院行因宫颈癌行根治性子宫切除术的 66 例患者作为研究对象。将入院患者随机分为观察组及对照组,观察组接受加速康复外科理念治疗(30 例),对照组为常规治疗组(36 例)。比较两组患者的肠鸣音恢复时间、肛门排气时间、下床行走时间、术后住院时间以及术后并发症的发生情况。**结果:**观察组与对照组肠鸣音恢复时间分别为(35.9± 3.4)h 及(39.6± 3.0)h,术后首次排气时间分别为(50.7± 2.7)h 及(54.8± 3.2)h,下床行走时间分别为(49.9± 2.6)h 及(53.6± 3.2)h。术后住院时间分别为(7.6± 1.7)d 及(9.2± 1.8)d,观察组以上指标均显著短于对照组($P<0.01$)。观察组与对照组的术后并发症总发生率分别为 10.11%及 23.44%,观察组显著低于对照组($P<0.05$)。两组拔除尿管后尿潴留的发生情况比较差异无统计学意义($P>0.05$)。**结论:**加速康复外科理念用于宫颈癌根治术患者的围手术期可有效加速患者的康复,且安全性较高。

关键词:加速康复外科;宫颈癌;根治性子宫切除术

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Application of Enhanced Recovery after Surgery in the Patients with Cervical Cancer Undergoing Radical Hysterectomy*

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ABSTRACT Objective: To explore the application value of enhanced recovery after surgery (EARS) for the perioperative period of cervical cancer patients undergoing radical hysterectomy. **Methods:** 66 cases of patients with cervical cancer undergoing radical hysterectomy from January 2013 to July 2018 were selected and randomly divided into the observation group and the control group. The control group was treated by routine perioperative intervention (36 cases), while the observation group was treated by EARS theory to perioperative intervention (30 cases). The intestinal sound recovery time, evacuation time, time to walk out of bed, postoperative hospitalization time and postoperative complications were compared between the two groups. **Results:** The intestinal sound recovery time of observation group and control group was (35.9± 3.4) h and (39.6± 3.0) h respectively, the first evacuation time after operation was (50.7± 2.7) h and (54.8± 3.2) h respectively, and the time to walk out of bed was (49.9± 2.6) h and (53.6± 3.2) h respectively. The postoperative hospitalization time was (7.6± 1.7) d and (9.2± 1.8) d respectively. The above indexes in the observation group were significantly shorter than those in the control group ($P<0.01$). The total incidence of postoperative complications in the observation group and the control group was 10.11% and 23.44%, respectively, and the observation group was significantly lower than that in the control group ($P<0.05$). There was no significant difference in the occurrence of urinary retention after the removal of urinary tract in the two groups ($P>0.05$). **Conclusions:** The application of ERAS theory on patients with cervical cancer undergoing radical hysterectomy can effectively accelerate the rehabilitation of patients with higher safety.

Key words: Enhanced Recovery After Surgery; Cervical cancer; Radical hysterectomy

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前言

宫颈癌是妇科常见的恶性肿瘤之一,而根治性子宫切除术是目前临床上治疗临床分期为 IA1-IB1 期、IIA1 期和部分 IB2/IIA2 期宫颈癌患者的常用手术方法,术中广泛切除宫颈旁

和阴道旁组织,并行盆腔淋巴结切除术,因此存在手术创伤大、手术时间长以及损伤盆腔自主神经等缺点,多数患者术后存在恢复时间长以及由于膀胱或直肠功能障碍而出现的排便或排尿功能受到不同程度的影响^[1,2]。

围手术期的干预措施同样是一种创伤,而加速康复外科

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(Enhanced Recovery After Surgery, ERAS)是指采用一系列有循证医学证据的围手术期处理的优化措施,减少手术病人生理和心理的创伤应激,以达到病人快速康复的目的^[3,4]。ERAS除了要求手术更加微创外,更通过改进围手术期的其他措施,加速手术病人的术后康复。快速康复外科理念自从引入我国以来,多家医学中心进行了临床研究,逐渐被医师所接受^[5,7]。尽管ERAS目前已应用于结直肠、胰腺外科^[8],但其在妇科手术中ERAS的研究仅仅包括因良性疾病而行的子宫切除术或癌前病变^[9-13],很少有研究评估ERAS在妇科恶性肿瘤中的作用^[14-16]。我院妇科病区自2013年1月起将加速康复理念应用于宫颈癌行根治性子宫切除术的患者,取得了较好的疗效,现将结果报道如下。

1 资料与方法

表1 观察组与对照组患者的一般情况比较($\bar{x} \pm s$)

Table 1 Comparison of the General information between patients in the observation group and control group($\bar{x} \pm s$)

Groups	Age	BMI((kg/m ²))	Number of cases (stage I/stage II)
Observation group(n=30)	46.5 $\pm$ 3.7	23.9 $\pm$ 1.5	20/10
Control group(n=36)	47.7 $\pm$ 4.1	23.3 $\pm$ 1.3	22/14
<i>P</i>	<i>P</i> >0.05>0.05	<i>P</i> >0.05>0.05	<i>P</i> >0.05>0.05

1.2 处理方法

所有患者均在全麻下行宫颈癌根治术,观察组及对照组患者采用不同的康复管理模式^[17]。对照组行常规处理,具体如下:1)术前营养评估、健康宣教;2)术前1日导泻剂行肠道准备,必要时灌肠,晚餐可饮水,22:00后禁食水;3)常规麻醉、预防感染、术中非控制性输液;4)术后去枕平卧, ≥ 6 h可翻身活动; ≥ 6 h可饮水;5)术后予清流食,排气后改流食、半流食。观察组在加速康复外科理念指导下行围手术期处理,具体如下:1)术前营养评估,健康宣教;2)术前1日导泻剂行肠道准备,必要时灌肠,晚餐可饮水,术前5h禁食,术前2h在护士指导下口服5%葡萄糖200mL;3)全麻,使用短效麻醉剂;预防感染;采取限制性补液,补液量 ≤ 30 mL/kg;4)麻醉与手术等待时盖被、术中应用保温毯、液体均在37℃恒温箱中存放取用;5)术后1~2d术后 ≥ 2 h可少量饮水, ≥ 6 h可进流食;6)尽早翻身坐立,术后24h内下地活动;7)减少腹腔引流管的放置,3-4天内拔除。

1.1 一般资料

回顾性分析2013年1月-2018年7月解放军南京总医院妇科病区收治的宫颈癌患者66例,所有患者均在全麻下成功行根治性子宫切除术。所有患者术前病理诊断明确;术前临床分期为IB1-IIA2期,宫颈癌根治术主刀者均为同一医师。根据采取的康复管理方法不同分成2组:观察组30例,采用围麻醉期加速康复管理方法,年龄35~60岁,平均(45.5 $\pm$ 3.7)岁;体重指数23.9 $\pm$ 1.5;临床分期:I期20例,II期10例。对照组36例,采用常规康复管理方法,年龄34~58岁,平均(47.7 $\pm$ 4.1)岁;体重指数23.3 $\pm$ 1.3;临床分期:I期22例,II期14例。两组患者的年龄、体重指数和临床分期构成比差异无统计学意义($P>0.05$),具有可比性(见表1)。

1.3 观察指标

比较两组患者的肠鸣音恢复时间、肛门排气时间、下床行走时间、术后住院时间以及术后并发症发生总率、拔除尿管后尿潴留的发生情况。

1.4 统计学方法

采用SPSS19.0统计软件对研究数据进行分析 and 处理,计量资料以($\bar{x} \pm s$)表示,组间比较采用t检验,计数资料以百分数(%)表示,采用 χ^2 检验,以 $P<0.05$ 为差异有统计学意义。

2 结果

2.1 两组患者术后康复相关指标的比较

观察组肠鸣音恢复时间、肛门排气时间、下床行走时间、术后住院时间均明显短于对照组,差异有统计学意义($P<0.01$),见表2。

表2 两组患者术后康复相关指标比较

Table 2 Comparison of the postoperative rehabilitation-related indicators between two groups

Groups	Intestinal sound recovery time(h)	Evacuation time (h)	Time to walk out of bed(h)	Postoperative hospitalization(d)
Observation group(n=30)	35.9 $\pm$ 3.4	50.7 $\pm$ 2.7	49.9 $\pm$ 2.6	7.6 $\pm$ 1.7
Control group(n=36)	39.6 $\pm$ 3.0	54.8 $\pm$ 3.2	53.6 $\pm$ 3.2	9.2 $\pm$ 1.8
<i>P</i>	<i>P</i> <0.01	<i>P</i> <0.01	<i>P</i> <0.01	<i>P</i> <0.01

2.2 两组患者术后住院期间并发症发生情况的比较

观察组患者术后咽喉炎、CO₂刺激症状、恶心呕吐的发生率分别为7.5%、12.5%和7.5%,对照组患者以上不良反应的发生率分别为37.5%、40.0%和30.0%,均显著高于观察组($P<0.05$)。

观察组与对照组的术后并发症总发生率分别为10.11%和23.44%,观察组显著低于对照组($P<0.05$)。观察组和对照组患者拔除尿管后尿潴留的发生率分别为10.0%和11.1%,两组比较差异无统计学意义($P>0.05$)。

3 讨论

手术应激会使患者机体处于高分解代谢状态,使心脏需求增加、组织相对缺氧、胰岛素抵抗增加、凝血模式障碍以及肺和胃肠道功能改变。机体对手术应激的反应导致器官功能紊乱、术后病率增加且最终延迟康复。加速康复外科(ERAS)理念的目的在于保持患者正常的围手术期生理,可降低手术压力或减轻与此相关不良结局的干预措施使得患者结局理想化。EARS理念在1997年由Kehlet最先提出^[18,19],该理念核心在于术前的早期护理教育、减少术中外科应激反应、有效减轻疼痛、术后早期下床活动以及早期进食促进患者快速康复、减少住院时间。而医院传统护理模式对于患者术后进食、活动、麻醉以及恶心、呕吐的控制没有标准模式可循。有效实施加速康复外科理念的核心需要术前详细的计划,在实施该方案前需举办包括手术医生、麻醉医生、护士等的多学科会议,使得团队中的每个成员均知晓术前、术中和术后护理的变化^[20]。加速康复外科理念早已成功地应用于结肠手术和良性妇科手术,但在妇科恶性肿瘤围手术期应用报道少,尤其在国内外鲜有报道。早期,恶性肿瘤被排除于EARS理念实践之外,可能由于考虑到恶性肿瘤患者年龄更大,且常有更多的合并症。但已有国外研究认为ERAS理念同样可以应用于妇科恶性肿瘤。与良性妇科肿瘤患者相比,恶性妇科肿瘤患者术后病率更高,手术时间更长,手术更复杂^[21]。本研究将加速康复外科理念应用于宫颈癌根治术患者,发现加速康复患者肠鸣音恢复时间、肛门排气时间及住院时间均较对照组明显缩短,且并发症减少,提示其可明显加速患者术后康复。

宫颈癌患者术前心理压力,严重者会影响患者手术治疗及术后康复。因此,进行围术期综合心理措施干预,及时的疏导可缓解其不良情绪,促使患者积极配合治疗^[22]。很多外科医生自在医学院学习起即有术前通宵禁食理念,但此观念并无循证医学的证据,在大手术前通过限水和限制热量与加速康复的目的反而相反。长期禁食不但导致术前口渴和饥饿是术前患者不适的最主要原因,而且对新陈代谢产生不利影响,从而影响临床结局^[23,24]。事实上,很多国家的标准禁食指南包括麻醉前2小时可进清水以及6小时禁食固体食物。禁食12小时足以引起从禁食到饥饿的代谢状态转变,导致肝脏糖原储备的加速消耗。动物研究证明禁食后对于损伤、特别是对出血压力的反应明显下降^[25,26]。本研究减少术前禁食时间,术前2h在护士指导下口服5%葡萄糖200mL,术前5h禁食固体食物,并未增加患者误吸等并发症,反而能缓解患者术前口渴,有助于术后加速康复。维持低血容量是加速康复外科的重要原则之一,传统理念认为为避免潜在少尿和肾损伤术中不应进行液体限制^[27]。术中过多的液体输注可能会导致低钠血症、肺及肠道水肿,增加术后心肺并发症发生率,延长住院时间。在本研究中,术中采取限制性补液,有利于降低以上不良反应的发生率。同样,术中积极对手术患者使用保温毯、输注恒温液体等保温措施能够促进体内药物代谢,减少手术对凝血功能、心脏功能的影响,防止伤口感染^[28-30]。

总之,本研究结果表明加速康复外科理念用于宫颈癌根治术患者的围手术期可有效加速患者的康复,且安全性较高。

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