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不同术式的剖宫产术对再次剖宫产产妇腹腔粘连、盆腔粘连及妊娠结局的影响

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摘要 目的:探讨不同术式的剖宫产术对再次剖宫产产妇腹腔粘连、盆腔粘连及妊娠结局的影响。**方法:**选取我院于2007年7月-2017年10月间收治的需再次行剖宫产产妇168例为研究对象。根据首次剖宫产术式分为对照组(新式腹壁横切式)92例和观察组(传统腹壁纵切式)76例。观察并比较两组产妇临床指标,盆腔粘连、腹腔粘连严重程度以及妊娠结局情况。**结果:**观察组产妇手术时间、胎儿娩出时间、术中出血量、住院时间、肛门排气时间均低于对照组,差异有统计学意义($P<0.05$)。观察组产妇腹腔粘连发生率为46.05%(35/76),显著低于对照组的77.17%(71/92),差异有统计学意义($P<0.05$)。观察组产妇盆腔粘连发生率为34.21%(26/76),低于对照组的54.35%(50/92),差异有统计学意义($P<0.05$)。两组产妇产后出血、术后切口感染、新生儿窒息等发生率比较差异无统计学意义($P>0.05$)。**结论:**首次剖宫产术式的选择对再次剖宫产产妇具有较大影响,传统腹壁纵切式可显著改善产妇临床指标情况,减少盆腔粘连、腹腔粘连发生的概率,且术后并发症较少,值得临床推广应用。

关键词:新式腹壁横切式;传统腹壁纵切式;再次剖宫产术;腹腔粘连;盆腔粘连;妊娠结局

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Effect of Different Surgical Caesarean Section on Parturients Undergoing Secondary Cesarean Section

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ABSTRACT Objective: To investigate the effect of different surgical caesarean section on abdominal adhesion, pelvic adhesion and pregnancy outcome in parturients undergoing secondary cesarean section. **Methods:** A total of 168 cases of secondary cesarean section, who were admitted to Affiliated Hospital of Zunyi Medical College from July 2007 to October 2017, were selected and were divided into control group (new type transverse abdominal wall, 92 cases) and observation group (traditional abdominal longitudinal type, 76 cases) according to the first cesarean section. The clinical indexes, abdominal adhesion, pelvic adhesion and pregnancy outcome were compared between the two groups of parturients. **Results:** The operation time, delivery time, amount of bleeding, hospitalization time, anal exhaust time in the observation group were lower than those in the control group ($P<0.05$). The incidence of abdominal adhesion[46.05% (35/76)] in the observation group was significantly lower than that[77.17% (71/92)] in the control group, the difference was statistically significant ($P<0.05$). The incidence of pelvic adhesions[34.21% (26/76)] in the observation group was significantly lower than that[54.35% (50/92)] in the control group, the difference was statistically significant ($P<0.05$). There were no significant differences in the incidence of post-partum hemorrhage, postoperative incision infection and neonatal asphyxia between the two groups ($P>0.05$). **Conclusion:** The choice of the first cesarean section has a great influence on the second cesarean section; the traditional abdominal longitudinal type can significantly improve maternal clinical indicators, reduce abdominal adhesion rate, with less complication, it is worthy of clinical application.

Key words: New type transverse abdominal wall; Traditional abdominal longitudinal type; Secondary cesarean section; Abdominal adhesion; Pelvic adhesion; Pregnancy outcome

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前言

剖宫产是指经腹切开子宫并取出胎儿的一类分娩方式,在

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合适的适应症范围内行剖宫产术可提高分娩成功率,同时有效控制围生儿以及高危妊娠妇女的病死率^[1-3]。随着社会生活结构的改变以及医疗技术的发展,分娩时选择剖宫产手术的孕产妇越来越多^[4,5]。自国家开放二胎政策以后,孕产妇的平均生育年龄逐渐提高,而伴随着年龄的增大,女性的盆骨、韧带等器官功能亦逐渐下降,给孕产妇妊娠结局带来严重的不良影响,导致再次行剖宫产术的概率增加^[6]。近年来随着麻醉、输血技术的发展,剖宫产术式得到了较大改进,手术方式趋于多样化,但关于

首次剖宫产术式的选择给再次剖宫产产妇带来的影响仍存在很大争议。有学者研究报道指出首次剖宫产术的不同对产妇再次剖宫产结局有较大影响,且会增加产妇并发症发生的风险^[7,9]。因此,本研究就我院收治的再次行剖宫产产妇的临床资料进行回顾性分析,以期为临床工作者们首次剖宫产术式的选择提供数据支持,现作如下报道。

1 资料与方法

1.1 一般资料

选取我院于2007年7月-2017年10月间收治的需再次行剖宫产产妇168例为研究对象。纳入标准:(1)所有产妇首次分娩行剖宫产术者;(2)所有产妇首次剖宫产为新式腹壁横切式或传统腹壁纵切式;(3)再次终止分娩时依旧选择剖宫产术者;(4)产妇及其家属知情本研究并签署知情同意书。排除标准:(1)伴随妊娠期高血压、糖尿病者;(2)剖宫产手术史超过2次者;(3)不具备剖宫产手术指征者;(4)首次剖宫产术后切口愈合不良者。根据首次剖宫产术式分为对照组(新式腹壁横切式)和观察组(传统腹壁纵切式),其中对照组92例,年龄27-37岁,平均(31.25 ± 1.26)岁;距首次分娩时间间隔为15个月-4年,平均(2.31 ± 0.89)年。观察组76例,年龄26-38岁,平均(30.89 ± 1.45)岁;距首次分娩时间间隔为16个月-4年,平均(2.16 ± 0.92)年。两组研究对象一般资料比较差异无统计学意义($P>0.05$),具有可比性,本研究已获得医院伦理委员会批准同意。

1.2 手术方法

1.2.1 对照组 首次剖宫产术式为新式腹壁横切式,经连续硬膜外麻醉后,于膀胱腹膜上约2-3cm处作一横向切口,长度约12-14cm(具体长度因胎头大小而定),仅切开真皮层,同时切除约3cm的皮下脂肪,使用小拉钩向双侧钝性分离脂肪层以便暴露子宫,在子宫下段肌层切开2-3cm,向两侧撕开子宫肌层,长度约为12-13cm,行常规破膜,胎儿娩出后,将胎膜以及胎盘取出,擦拭子宫,使用可吸收线缝合子宫切口以及皮下组织,腹膜不进行缝合操作。术后留置导尿管,12h内禁食水,同时静脉滴注抗生素预防感染。

1.2.2 观察组 首次剖宫产术式为传统腹壁纵切式,采用连续硬膜外麻醉,经下腹从脐下至耻骨之间,腹正中线作一纵向切

口,长度约10-12cm(具体长度因胎头大小而定),依次切开腹壁和子宫,于子宫下段正中间处作切口暴露胎膜,常规破膜后,将溢出的羊水吸干,取出胎儿,随后娩出胎盘、胎膜,清洗腹腔后,依次缝合子宫以及腹壁。术后护理操作与对照组一致。两组产妇首次剖宫产术均在本院进行。

1.2.3 再次剖宫产手术 两组产妇均行连续硬膜外麻醉,然后将首次剖宫产时遗留的旧疤痕组织清除干净后,行改良新式剖宫产术式,作一腹壁纵切口,分别切开皮下筋膜与脂肪,依次分离腹直肌间黏着部分、子宫下段肌肉组织后,将部分羊水吸出,随后娩出胎儿、胎膜以及胎盘,清理子宫腔后,使用可吸收线将子宫肌层、腹膜以及皮下组织依次缝合。术后护理操作与首次剖宫产一致。

1.3 观察指标

观察并比较两组产妇手术时间、胎儿娩出时间、术中出血量、住院时间以及肛门排气时间,其中术中出血量采用负压瓶结合纱布吸收测定。比较两组产妇腹腔粘连严重程度情况,腹腔粘连严重程度分为轻、中、重三种^[10],其中轻度表现为切口与腹腔网膜微粘连,分离部位未出血;中度表现为切口、腹壁以及膀胱粘连,分离部位少量出血;重度表现为切口与肠管等较远的组织发生粘连,分离困难且出血量大。比较两组产妇盆腔粘连严重程度情况^[11],盆腔粘连严重程度分为I级、II级、III级,其中I级表现为腹壁与腹膜粘连,腹膜与子宫、部分网膜粘连,II级表现为子宫与膀胱、腹膜大面积粘连,III级表现为子宫与膀胱、肠管严重粘连。比较两组产妇妊娠结局情况,包括产后出血情况、术后切口感染以及新生儿窒息发生情况。

1.4 统计学方法

数据分析采用SPSS24.0软件进行,计量资料以($\bar{x} \pm s$)表示,实施t检验,计数资料以率或百分比表示,实施 χ^2 检验,检验标准设置为 $\alpha=0.05$ 。

2 结果

2.1 两组产妇临床指标比较

观察组产妇手术时间、胎儿娩出时间、术中出血量、住院时间、肛门排气时间均低于对照组,差异有统计学意义($P<0.05$),见表1。

表1 两组产妇临床指标比较($\bar{x} \pm s$)
Table 1 Comparison of maternal clinical indicators between the two groups($\bar{x} \pm s$)

Groups	n	Operation time (min)	Delivery time (min)	Amount of bleeding(mL)	Hospitalization time(d)	Anal exhaust time (h)
Control group	92	79.18±16.55	12.01±2.35	378.24±55.68	5.13±1.85	56.35±7.08
Observation group	76	56.01±13.04	8.23±3.12	247.78±16.25	3.87±1.45	41.25±7.15
t		9.922	8.949	19.734	4.835	13.698
P		0.000	0.000	0.000	0.000	0.000

2.2 两组产妇腹腔粘连情况比较

观察组产妇腹腔粘连发生率为46.05%(35/76),显著低于对照组的77.17%(71/92),差异有统计学意义($P<0.05$),见表2。

2.3 两组产妇盆腔粘连情况比较

观察组产妇盆腔粘连发生率为34.21%(26/76),低于对照组的54.35%(50/92),差异有统计学意义($P<0.05$),见表3。

表 2 两组产妇腹腔粘连情况比较[n(%)]
Table 2 Comparison of abdominal adhesions of parturients between two groups[n(%)]

Groups	n	No adhesion	Light	Moderate	Severe	Incidence of adhesion
Control group	92	21(22.83)	17(18.48)	30(32.61)	24(26.09)	71(77.17)
Observation group	76	41(53.95)	16(21.05)	10(13.16)	9(11.84)	35(46.05)
χ^2	-					17.311
P	-					0.000

表 3 两组产妇盆腔粘连情况比较[n(%)]
Table 3 Comparison of pelvic adhesions of parturients between two groups [n(%)]

Groups	n	No adhesion	Class I	Class II	Class III	Incidence of adhesion
Control group	92	42(45.65)	26(28.26)	15(16.30)	9(9.78)	50(54.35)
Observation group	76	50(65.79)	15(19.74)	9(11.84)	2(2.63)	26(34.21)
χ^2	-					6.813
P	-					0.009

2.4 两组产妇妊娠结局情况比较

两组产妇产后出血、术后切口感染、新生儿窒息等发生率

表 4 两组产妇妊娠结局情况比较[n(%)]

Table 4 Comparison of pregnancy outcomes between two groups [n(%)]

Groups	n	Postpartum hemorrhage	Postoperative incision infection	Neonatal asphyxia
Control group	92	6(6.52)	2(2.17)	1(1.09)
Observation group	76	2(2.63)	3(3.95)	0(0.00)
χ^2		1.389	0.453	0.831
P		0.239	0.501	0.362

3 讨论

迄今为止已有多项研究证实,伴随着剖宫产次数的增加,子宫发生破裂的风险亦随之上升,因此,每一次终止妊娠时剖宫产术式的选择都对今后的再次妊娠有着深远的影响^[12-14]。传统腹壁纵切式与新式腹壁横切式均是临床广泛运用的剖宫产手术方式,传统腹壁纵切式操作简便,胎头取出较为容易,情况紧急时可迅速娩出胎儿,但该术式术后产妇切口疤痕较为明显,严重影响了产妇身体的美观性^[15-17]。近年来,新式腹壁横切式由于其切口位置较低,横弧线形的切口与皮肤纹理相似,更易受到年轻产妇的青睐,并已逐渐成为临床工作者们的首选推荐术式^[18-20]。有学者研究指出,新式腹壁横切式手术风险大,尤其针对需立即终止妊娠的产妇,如胎儿宫内窘迫、胎盘前置、先兆子宫破裂等紧急情况时,该术式不能短时间内取出胎儿,临床应用具有一定的局限性^[21-23]。近年来,随着再次剖宫产产妇数量的增加,传统腹壁纵切式与新式腹壁横切式这两种剖宫产术式对再次剖宫产的影响以及局限性引起了临床工作者的广泛关注。

本研究选择首次剖宫产方式为传统腹壁纵切式和新式腹壁横切式的需再次行剖宫产产妇为研究对象,回顾分析其临床资料,研究结果显示观察组产妇手术时间、胎儿娩出时间、术中

出血量、住院时间、肛门排气时间均低于对照组($P<0.05$),与章文巧等人的结论基本一致^[24,25],表明产妇首次剖宫产术式为传统腹壁纵切式可显著改善再次剖宫产产妇各项临床指标。分析其原因,笔者认为主要由于新式腹壁横切式的开腹方式为钝性分离,且开腹时解剖层次不清晰,再次手术时腹直肌前鞘、腹直肌后鞘及腹膜粘连程度较为严重,手术操作难度增加,易造成膀胱等脏器的损伤,直接导致再次剖宫产手术时间延长,术中出血量增加,且术后恢复时间亦相对延长。另外,与传统腹壁纵切式相比较,新式腹壁横切式胎头的娩出易受切口长度的影响,致使术中胎头不易取出,胎儿娩出时间随之增加^[26,27]。在本研究结果中,观察组产妇腹腔粘连、盆腔粘连发生率分别为46.05%、34.21%,低于对照组的77.17%、54.35%($P<0.05$)。表明首次剖宫产术式为新式腹壁横切式的再次剖宫产产妇盆腔粘连、腹腔粘连发生率显著增加,一方面主要是因为新式腹壁横切式钝性分离时对腹膜机械性损伤较大,腹直肌分离时肌纤维受到损害,同时撕拉的腹膜切口参差不齐,术后增加盆腔粘连、腹腔粘连的发生率,另一方面新式腹壁横切式未缝合腹膜,裸露的组织粗糙,促进腹膜爬行前粘连,且大网膜趋于保护创面,易提高腹壁、大网膜与子宫前壁粘连发生率^[28-30]。本研究通过观察两组产妇妊娠结局情况发现,两组产妇产后出血、术后切口感染、新生儿窒息等发生率比较差异无统计学意义($P>0.05$)。

提示首次剖宫产术式的选择对两组再次剖宫产产妇妊娠结局情况影响不大,这可能与本研究选取的样本量较小有关,针对新式腹壁横切式是否会对再次剖宫产产妇妊娠结局产生影响,后期研究将进一步扩大样本量加以验证。

综上所述,与新式腹壁横切式比较,传统腹壁纵切式具有手术时间短,胎儿娩出迅速,术中出血量少,术后恢复时间快等优势,且可降低盆腔粘连、腹腔粘连的发生率,有利于再次行剖宫产手术,适于临床推广。

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