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乳酸依沙吖啶联合子宫颈扩张单球囊对瘢痕子宫中期妊娠引产的应用效果*

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摘要 目的:研究乳酸依沙吖啶联合子宫颈扩张单球囊对瘢痕子宫中期妊娠引产的应用效果。**方法:**选择 2014 年 4 月~2016 年 12 月在我院进行诊治的由于社会因素或者医学因素自愿要求终止妊娠并无任何引产禁忌证的 110 例健康中期妊娠(孕周 14~27 周)孕妇为研究对象,随机分为观察组与对照组,每组各 55 例。对照组采用常规方案进行引产,即口服米非司酮 150 mg,并在 B 超引导下经腹壁行羊膜腔内注射 100 mg 乳酸依沙吖啶;观察组采用乳酸依沙吖啶联合子宫颈扩张单球囊进行引产。比较两组孕妇的引产成功率、产程时间、宫缩发动时间、胎儿娩出时间、产后 2 h 出血量、住院时间、引产并发症的发生情况以及多次剖宫产患者的引产成功率。**结果:**观察组孕妇的引产成功率为 96.36%(53/55),明显高于对照组[83.64%(46/55)]($P<0.05$),且观察组的产程时间、宫缩发动时间、产后 2 h 出血量以及住院时间均明显低于对照组($P<0.05$)。对照组多次剖宫产孕妇引产成功率为 33.33%(2/6),观察组多次剖宫产孕妇引产成功率为 100.00%(7/7),观察组明显高于对照组($P<0.05$)。对照组发生宫颈裂伤 1 例,会阴裂伤 1 例,两组孕妇均未出现羊水栓塞、子宫破裂以及感染等并发症。**结论:**乳酸依沙吖啶联合子宫颈扩张单球囊用于瘢痕子宫中期妊娠引产的应用效果明显优于口服米非司酮并在 B 超引导下经腹壁行羊膜腔内注射乳酸依沙吖啶,且安全性高。

关键词:乳酸依沙吖啶;子宫颈扩张单球囊;瘢痕子宫;中期妊娠引产

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Application Effect of Ethacridine Combined with Cervical Dilatation Single Balloon on Scar Uterine Mid Pregnancy Induced Labor*

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ABSTRACT Objective: To investigate the clinical effect of ethacridine combined with cervical dilatation single balloon on the scar uterine mid pregnancy induced labor. **Methods:** 110 cases of pregnant women (gestational age 14 ~ 27 weeks) who were treated in our hospital from April 2014 to December 2016 due to social factors or medical factors of voluntary termination of pregnancy and without any contraindication labor were selected and randomly divided into two groups, 55 cases in each group. The control group was given conventional scheme of induction, including 150 mg mifepristone and ultrasound guided transabdominal amniotic cavity injection of ethacridine lactate 100 mg; the observation group was treated with ethacridine combined with cervical dilatation of single balloon induction. The success rate of induction of labor, labor time, the time of uterine contraction, fetal childbirth time, 2 h postpartum bleeding, hospitalization time, abortion complications and multiple cesarean section patients with success rate were compared between two groups. **Results:** The success rate of induction of labor in observation group was 96.36% (53/55), which was significantly higher than that of the control group[83.64 % (46/55)]($P<0.05$); the labor time, time of uterine contraction, 2 h postpartum bleeding volume and hospitalization time of observation group were significantly lower than those of the control group ($P<0.05$). The successful induction rate of pregnant women with repeated cesarean section in control group was 33.33% (2/6), which was 100% in the observation group and was significantly higher than that of the control group ($P<0.05$). One cases of cervical laceration and perineal laceration occurred in the control group, and there was no complications such as amniotic fluid embolism, uterine rupture and infection in the two groups of pregnant women. **Conclusion:** Ethacridine combined with cervical dilatation of single balloon had better effect on uterine scar pregnancy induced labor with high safety.

Key words: Ethacridine lactate; Single balloon dilatation of the cervix; Uterine scar; Induction of labor in midpregnancy

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前言

近年来,随着剖宫产术的日益增多,瘢痕子宫的发生率也

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不断升高,使再次妊娠的分娩难度大大增加。瘢痕子宫早期妊娠可以采用人工终止或药物引产的方式,操作较为简单,但由于中期妊娠孕妇的宫颈成熟度相对较差,如果处理不当则可能出现大出血、子宫破裂以及羊水栓塞等较为严重的并发症,对孕妇的生命安全造成严重威胁^[1-3]。因此,选择有效且安全的引产方法以保证产妇顺利地终止妊娠具有重要的临床意义。

乳酸依沙吡啶是通过羊膜腔内注射引产的一种强力杀菌剂,是目前临床引产常用的药物之一,作用方式为使胚胎蜕膜组织变性,诱导激素释放,产生宫缩反应,进而排出胎儿成功引产。研究表明子宫扩张球囊可增强宫颈口张力,刺激孕妇分泌前列腺激素,进而促进宫颈成熟,为孕妇顺利生产提供必要条件。而近年来,国内外有关子宫扩张球囊在妊娠晚期促宫颈成熟中的研究报道较多^[4,5],但尚无关于中期妊娠引产的研究。本研究主要探讨了乳酸依沙吡啶联合子宫扩张球囊对瘢痕子宫中期妊娠引产的应用效果,现报道如下。

1 资料与方法

1.1 研究对象

选择 2014 年 4 月~2016 年 12 月在我院进行诊治的由于社会因素或者医学因素自愿要求终止妊娠并无任何引产禁忌证的 110 例健康中期妊娠(孕周 14~27 周)孕妇为研究对象,排除肝肾功能严重障碍、妊娠并发症、精神异常以及前置胎盘等孕妇,将其随机分为观察组与对照组。观察组 55 例,年龄 27~43 岁,平均(31.25±4.17)岁;孕周 14~27 周,平均(19.13±3.24)周;孕次 1~5 次,平均(2.37±1.28)次;引产时间距离上次剖宫产时间 0.5~5 年,平均(2.13±0.46)年。观察组 55 例,年龄 28~43 岁,平均(31.42±4.07)岁;孕周 14~27 周,平均(19.25±3.14)周;孕次 1~5 次,平均(2.45±1.13)次;引产时间距离上次剖宫产时间 0.5~5 年,平均(2.23±0.58)年。所有孕妇均签署知情同意书,两组孕妇的基线资料比较差异均无统计学意义($P>0.05$),具有可比性。

1.2 治疗方法

两组孕妇均先进行尿常规、血常规、肝肾功能、传染四项、

白带和心电图等常规检查。对照组采用常规方案进行引产,即口服米非司酮片(批号:国药准字 H20010633,生产厂家:北京紫竹药业有限公司,规格:10 mg) 150 mg,顿服,且嘱孕妇于服药前后的 2 h 之内严禁饮食;并在 B 超引导下经腹壁行羊膜腔内注射乳酸依沙吡啶注射液(批号:国药准字 H63020043,生产厂家:青海制药厂有限公司,规格:2 mL: 50 mg) 100 mg;观察组采用乳酸依沙吡啶联合子宫扩张球囊(一次性球囊宫颈扩张器,江苏爱源医疗科技有限公司,注册证书编号:苏食药监械(准)字 2013 第 2660783 号)进行引产,于入院次日下午经阴道放置子宫扩张球囊,孕妇取膀胱截石位,将窥阴器放入阴道暴露宫颈后进行消毒。然后把球囊插到宫颈管中,以使囊管凸起位置到达宫颈外口。向子宫球囊注入 30 mL 生理盐水,使子宫球囊膨胀变大。再拿出窥阴器,将导管向外牵拉,按照每次 30 mL 的量向宫颈球囊注入生理盐水,使球囊内水至 150 mL。如孕妇出现感染征象、胎心异常、宫缩过强或者有不明确原因阴道出血等情况时则应当取出球囊。观察组乳酸依沙吡啶的注射方法与对照组相同。

1.3 评价指标

比较两组孕妇的引产成功率、产程时间、宫缩发动时间、胎儿娩出时间、产后 2 h 出血量、住院时间、引产并发症发生情况以及多次剖宫产患者的引产成功率。羊膜腔内注射乳酸依沙吡啶注射液后 72 h 内娩出胎盘、胎儿即为引产成功。

1.4 统计学分析

采用 SPSS15.00 软件进行统计学分析,计量资料以 $\bar{x} \pm s$ 表示,组间对比用 t 检验,组间率的比较用 2 检验,以 $P<0.05$ 表明差异有统计学意义。

2 结果

2.1 两组孕妇的引产效果对比

观察组孕妇的引产成功率为 96.36%(53/55),明显高于对照组[83.64%(46/55)]($P<0.05$),且观察组的产程时间、宫缩发动时间、产后 2 h 出血量以及住院时间均明显低于对照组($P<0.05$),见表 1。

表 1 两组孕妇的引产效果对比

Table 1 Comparison of the Efficacy of labour Induction of Pregnant Woman between two Groups

Groups	Cases	Induced labor success	Birth process time	Contractions Start	Postpartum 2 h the	Hospital Stay
		rate [case(%)]	(h, $\bar{x} \pm s$)	Time (h, $\bar{x} \pm s$)	bleeding (mL, $\bar{x} \pm s$)	
Control group	55	46(83.64)	6.53±2.15	24.35±3.76	153.46±45.23	6.28±1.53
Observation group	55	53(96.36)*	4.27±2.08 *	19.12±4.53*	139.27±41.54*	4.25±1.37*

Note: Compared with control group, * $P<0.05$.

2.2 两组多次剖宫产孕妇的引产成功率对比

对照组的 6 例多次剖宫产孕妇中,有 2 例引产成功,引产成功率为 33.33%(2/6);观察组的 7 例多次剖宫产孕妇中,所有孕妇均引产成功,引产成功率为 100.00%(7/7);观察组多次剖宫产孕妇的引产成功率明显高于对照组($P<0.05$)。

2.3 两组并发症的发生情况对比

对照组发生宫颈裂伤 1 例,会阴裂伤 1 例,两组孕妇均未出现羊水栓塞、子宫破裂以及感染等并发症。

3 讨论

瘢痕子宫主要与子宫肌瘤剔除术、剖宫产术和子宫畸形矫治术等子宫手术有关,其中最主要的为剖宫产术^[6,7]。瘢痕子宫因内科合并症、胎儿畸形、产科严重并发症、社会因素以及死胎等多种原因使引产的潜在风险增高,尤其是妊娠中期(孕周 14~27 周)。中期妊娠的孕妇由于胎儿的体型相对较大,胎儿的骨骼变硬,机体内的胎盘已经成形,宫颈尚未成熟,子宫变大、

变软,子宫颈扩张较为缓慢,使得子宫难以进行规律的收缩,极易发生不规则宫缩以及强直子宫收缩等情况,出现阴道损伤和子宫破裂等并发症^[8-10]。此外,由于孕妇是瘢痕子宫,瘢痕部位已经形成纤维性组织,降低了子宫颈的扩张能力,易导致软产道损伤以及产程延长等并发症的发生^[11]。

瘢痕子宫中期妊娠引产均为个体化引产方案,目前尚无指南可循,目前临床上主要采用前列腺素联合米非司酮、剖宫取胎、依沙吖啶羊膜腔注射、海藻棒扩张宫颈以及水囊引产等引产方法^[12,13]。乳酸依沙吖啶最初只用于外科创伤、黏膜和皮肤等部位的洗涤以及消毒,后来逐渐应用于引产,能加速子宫内蜕膜组织发生坏死,进而促进内源性前列腺素的产生,导致子宫发生收缩,并且可以直接兴奋子宫肌肉,有效促进羊水中前列腺素的合成以及释放,进而加速子宫收缩,促进胎儿的排出^[14,15]。乳酸依沙吖啶用于妊娠引产具有价格低廉、操作简单、安全有效、成功率高、严重并发症较少以及感染率低等多种优点^[16-18]。但乳酸依沙吖啶药物本身并不能促进宫颈成熟,在引产过程中产生的宫缩不是自发宫缩,极易引发不协调宫缩,使得瘢痕子宫裂伤的风险大大增加,对于羊水量少、孕周小以及穿刺难度大的孕妇较难成功^[19-21]。

子宫颈扩张单球囊主要通过球囊对宫颈管产生的机械性刺激以及压迫性作用,促进宫颈局部分泌并且释放大量的前列腺素,有效促进子宫成熟,并通过机械扩张作用直接扩张宫颈,缩短产程^[22,23]。此种非药物的引产方法促宫颈成熟作用极为温和,对于需要避免长时间宫缩的患者,如瘢痕子宫、胎儿宫内生长受限、胎盘功能不全以及羊水过少的产妇极为有利^[24,25]。有研究选择 151 例需要引产的足月单胎产妇为研究对象,分别采用宫颈扩张单球囊和宫颈扩张双球囊,以比较宫颈扩张单球囊及双球囊促宫颈成熟效果^[26],结果显示宫颈扩张单球囊具有较低的剖宫产率,较高的自然临产率,相比于宫颈扩张双球囊更适用于临床促宫颈成熟^[27]。本研究中,对照组采用常规方案进行引产,即口服米非司酮 150 mg,并在 B 超引导下经腹壁行羊膜腔内注射 100 mg 乳酸依沙吖啶;观察组采用乳酸依沙吖啶联合子宫颈扩张单球囊进行引产。结果显示观察组孕妇的引产成功率为 96.36% (53/55),明显高于对照组[83.64% (46/55)],且产程时间、宫缩发动时间、产后 2 h 出血量以及住院时间均明显低于对照组,多次剖宫产孕妇引产成功率明显高于对照组,表明乳酸依沙吖啶联合子宫颈扩张单球囊可以有效促进瘢痕子宫中期妊娠孕妇的宫颈成熟度,并且可以诱发宫缩,使宫颈成熟度与宫缩之间保持同步,从而降低子宫破裂的发生风险,大大增加引产成功率,并且适用于多次剖宫产的高危孕妇。此外,对照组发生宫颈裂伤 1 例,会阴裂伤 1 例,两组孕妇均未出现羊水栓塞、子宫破裂以及感染等并发症。已有大量研究表明子宫颈扩张单球囊促进宫颈成熟方面安全有效^[28-30],与本研究结果一致。

综上所述,乳酸依沙吖啶联合子宫颈扩张单球囊对瘢痕子宫中期妊娠引产具有较好的应用效果,且安全性高。

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