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## 择期经阴道宫颈环扎术与期待疗法治疗宫颈机能不全的效果比较 \*

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**摘要 目的:**比较择期经阴道宫颈环扎术以及期待疗法治疗宫颈机能不全的效果。**方法:**选择 2017 年 10 月~2019 年 10 月我院收治的 201 例宫颈机能不全患者,将其随机分为两组。对照组 100 例患者采取期待疗法,即卧床休息,口服地屈孕酮,每次服用的剂量为 10 mg,每日 2 次,一直服药到 30 孕周;观察组 101 例患者择期经阴道宫颈环扎术,比较两组的早产率、成功妊娠率、新生儿出生体重以及分娩孕周。**结果:**对照组 100 例宫颈机能不全患者中,22 例患者流产(占 22.00%),78 例患者获得活婴(占 78.00%),78 例成功分娩的患者中,47 例患者  $\geq 37$  周分娩,31 例患者  $<37$  周分娩,早产率为 39.74%(31/78)。观察组的 101 例患者中,8 例患者流产(占 7.92%),93 例患者获得活婴(占 92.08%)。93 例成功分娩的患者中,81 例患者  $\geq 37$  周分娩,12 例患者  $<37$  周分娩,早产率为 12.90%(12/93);12 例早产的患者中,4 例患者由于胎膜早破和胎儿窘迫,而在孕 32~33 周采取剖宫产手术,2 例患者由于胎膜早破臀位,而在孕 35~36 周时采取剖宫产手术,6 例患者在孕 35~36 周早产。观察组宫颈机能不全患者的早产率明显低于对照组( $P<0.05$ ),且成功妊娠率、新生儿出生体重以及分娩孕周明显高于或长于对照组( $P<0.05$ )。**结论:**与期待疗法相比较,择期经阴道宫颈环扎术不但可以明显延长宫颈机能不全患者的分娩孕周,提高成功妊娠率,还能改善新生儿的预后,降低早产的风险。

**关键词:**经阴道宫颈环扎术;期待疗法;宫颈机能不全

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## Comparison of the Effect of Selective Transvaginal Cerclage and Expectant Therapy on the Cervical Insufficiency\*

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**ABSTRACT Objective:** To compare of the effect of selective transvaginal cervical cerclage and expectant therapy in the treatment on the cervical incompetence. **Methods:** Selected 201 patients with cervical incompetence admitted in our hospital from October 2017 to October 2019 and randomly divide them into two groups. The 100 patients in the control group received expectant therapy, that is, the patient rests in bed, and takes oral desdrogesterone, each dose is 10 mg, twice daily, and the medicine is taken until 30 weeks of gestation. The 101 patients in the observation group received selective transvaginal cervical cerclage. Compare the preterm birth rate, successful pregnancy rate, birth weight of the newborn, and the gestational age of childbirth between the two groups. **Results:** Among the 100 patients with cervical incompetency in the control group, 22 patients had abortion (22.00%), 78 cases had live infants (78.00%), and among 78 patients who successfully delivered, 47 patients gave birth  $\geq 37$  weeks, 31 patients gave birth less than 37 weeks, and the premature delivery rate was 39.74% (31/78). Of the 101 patients with cervical incompetency in the observation group, 8 (7.92%) had abortion and 93 (92.08%) had live infants. Among 93 patients who delivered successfully, 81 patients gave birth  $\geq 37$  weeks. Of the 12 patients gave birth  $<37$  weeks, and the premature delivery rate was 12.90% (12/93), 4 patients of them had a caesarean section at 32 to 33 weeks of pregnancy due to premature rupture of membranes and fetal distress, and 2 patients underwent cesarean section at 35 to 36 weeks of pregnancy due to premature rupture of the fetal membranes, and 6 patients were born prematurely at 35 to 36 weeks of pregnancy. The preterm birth rate of the patients with cervical dysfunction in the observation group was significantly lower than that in the control group ( $P<0.05$ ), and the successful pregnancy rate, birth weight and gestational age of the newborn in the observation group were significantly higher or longer than those in the control group ( $P<0.05$ ). **Conclusion:** Compared with anticipated therapy, elective transvaginal cervical cerclage can not only significantly prolong the gestational weeks of delivery in patients with cervical insufficiency, improve the success rate of pregnancy, but also improve the prognosis of newborns and reduce the risk of premature delivery.

**Key words:** Transvaginal cervical cerclage; Expectation therapy; Cervical incompetence

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## 前言

宫颈机能不全也被称为子宫颈口松弛症,详细发病机制还未被完全阐明。多项研究表明该病是后天子宫颈受到损伤或者先天的发育不全导致子宫峡部括约肌的功能显著降低,进而使得患者的子宫颈内口发生松弛,妊娠中晚期发生病理性的扩张,胎囊突出,最终导致宫颈机能不全的发生<sup>[1-4]</sup>。宫颈机能不全患者的宫颈无法维持正常的妊娠,常常会引起习惯性流产和早产<sup>[5]</sup>。目前,宫颈机能不全的发病率为0.5%~1.0%,往往会反复发生,对患者的生殖健康造成严重的危害,给患者的家庭和社会产生严重的不良影响<sup>[6,7]</sup>。

临幊上治疗宫颈机能不全的手段主要有经阴道宫颈环扎术和保守期待疗法两种<sup>[8]</sup>,但尚无研究报道何种疗法在改善妊娠结局方面具有更加令人满意的應用价值。因此,本研究选取了我院收治的201例宫颈机能不全患者,分别采取择期经阴道宫颈环扎术以及期待疗法,对比分析了两种疗法对妊娠结局的影响。

## 1 资料与方法

### 1.1 一般资料

选择2017年10月~2019年10月我院收治的201例宫颈机能不全患者,诊断标准:(1)既往有明确的至少1次中期妊娠自然流产史。(2)在非孕期,能无阻力地将8号宫颈扩张器置入到患者的宫颈中直到宫腔。(3)流产时没有先兆流产的症状,既往没有子宫收缩痛而出现羊膜囊突出、颈管消失。(4)在非孕期,B超检测患者的宫颈管的长度小于2.5cm,或者宽度大于0.6cm。(5)在非孕期,经子宫输卵管造影检查证实患者的子宫峡部漏斗部位出现明显的管状扩大。符合上面5条诊断标准中的第1条,而且具备其它4条诊断标准中任何1条的患者即能被确诊患有宫颈机能不全。纳入标准:(1)符合诊断标准,(2)符合宫颈漏斗形成和宫颈长度小于30mm的阴道宫颈环扎术指征。排除标准:(1)胎儿畸形的患者;(2)对宫缩抑制剂过敏的患者;(3)目前无阴道流血及宫缩;(4)因为感染、内分泌失衡、遗传异常等因素造成的早产或者流产。两组均无脱落病例。用抽签法随机分为两组。观察组101例,年龄23~41岁,平均(31.29±4.53)岁;流产1~6次,平均(2.27±0.69)次;孕周13~20周,平均(15.37±1.86)周;体质量指数23~31kg/m<sup>2</sup>,平均(27.16±2.83)kg/m<sup>2</sup>。对照组100例,年龄23~41岁,平均(32.45±3.97)岁;流产1~6次,平均(2.31±0.73)次;孕周13~20周,平均(15.45±1.78)周;体质量指数23~31kg/m<sup>2</sup>,平均(27.25±3.16)kg/m<sup>2</sup>。两组的基线资料具有可比性。

### 1.2 治疗方法

对照组采取期待疗法,即卧床休息,口服地屈孕酮,每次服用的剂量为10mg,每日2次,一直服药到30孕周。观察组择期行经阴道宫颈环扎术。方法如下:<sup>①</sup>术前准备方法:采取B超检查将畸形胎儿进行排除;清洁并且常规检查阴道的分泌物;常规静脉滴注硫酸镁及口服硝苯地平片,以有效预防子宫收缩,共3d;择期进行手术,术前30min采取抗生素以避免发生感染。<sup>②</sup>经阴道宫颈环扎术的手术操作方法:取膀胱截石位,头低脚高体位,行蛛网膜下-硬膜外复合麻醉或者硬膜外麻醉,

改良的McDonald技术。<sup>③</sup>术后处理方法:常规给予硫酸镁注射液1d及口服硝苯地平片2d,常规抗感染2d。出院后2~4周进行门诊复查,采取宫颈触诊以及经阴道超声检查。如果患者出院后发生阴道流血、腹痛和阴道流液时,需要马上就诊。

### 1.3 观察指标

记录并比较两组宫颈机能不全患者的妊娠结局:早产率、成功妊娠率、新生儿出生体重以及分娩孕周。

### 1.4 统计学分析

采用SPSS 20.0进行数据分析,两组间计量资料对比用t检验,计数资料组间比较采用χ<sup>2</sup>检验,以P<0.05为差异有统计学意义。

## 2 结果

### 2.1 对照组的妊娠结局

对照组的100例患者中,22例流产(占22.00%),78例获得活婴(占78.00%)。78例成功分娩的患者中,47例≥37周分娩,31例<37周分娩,早产率为39.74%(31/78);31例早产的患者中,9例在孕29周发生先兆早产,12例患者在孕32~34周发生早产,10例患者在孕35~36周发生早产。足月分娩的母婴状况都比较好。

### 2.2 观察组的妊娠结局

观察组的101例患者中,8例患者流产(占7.92%),93例患者获得活婴(占92.08%)。93例成功分娩的患者中,81例患者≥37周分娩,12例患者<37周分娩,早产率为12.90%(12/93);12例早产的患者中,4例患者由于胎膜早破和胎儿窘迫,而在孕32~33周采取剖宫产手术,2例患者由于胎膜早破臀位,而在孕35~36周时采取剖宫产手术,6例患者在孕35~36周早产。足月分娩的母婴状况都比较好。8例流产的患者,均由于孕27周发生宫缩,但是不能有效抑制宫缩,拆除环扎线之后而自然流产。101例患者在术后一周内均未发生如感染、自然流产、宫颈损伤以及出血等并发症。

### 2.3 两组的早产率、成功妊娠率、新生儿出生体重以及分娩孕周比较

观察组的早产率明显低于对照组(P<0.05),且成功妊娠率、新生儿出生体重以及分娩孕周明显高于对照组(P<0.05),见表1。

## 3 讨论

宫颈机能不全患者比较典型症状是于中孕期发生无痛性的宫颈扩张,出现或者不出现胎膜早破,羊膜囊明显突出于阴道,随后患者会分娩出已经无法存活的胎儿<sup>[9-12]</sup>。宫颈机能不全的病因不明,多由宫颈锥切术、宫颈裂伤、宫颈环形电切术等后天外科创伤或先天性的宫颈机能不全所致<sup>[13-15]</sup>。宫颈机能不全引起早产以及晚期流产的一种主要疾患。据临床统计,在妊娠16~28周的复发性流产中,高达15%的患者是由宫颈机能不全所致<sup>[16-19]</sup>。部分患者可能会在妊娠期同一孕周内反复多次发生胎儿丢失的情况,对患者的身心健康造成负面影响<sup>[20,21]</sup>。宫颈机能不全主要采取手术疗法,手术的目的在于建立和修复正常的宫颈内口功能以及形态,尽可能使患者宫颈管的张力加强,有效抑制宫颈口的扩张和子宫下段的延伸<sup>[22]</sup>。

表 1 两组的早产率、成功妊娠率、新生儿出生体重以及分娩孕周比较

Table 1 Comparison of the preterm delivery rate, successful pregnancy rate, birth weight of newborn and gestational weeks of delivery between the two groups

Groups	n	Preterm delivery rate [n(%)]	Successful pregnancy rate [n(%)]	Birth weight of newborn ( $\bar{x} \pm s$ , g)	Gestational weeks of delivery ( $\bar{x} \pm s$ , week)
Control group	100	31 (39.74)	78 (78.00)	2731.49±258.34	32.17±1.65
Observation group	101	12 (13.04)*	93 (92.08)*	3294.67±315.48*	35.23±2.34*

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

宫颈环扎术主要通过环扎增强宫颈的承受力,抑制宫颈管缩短和扩张,协助承担胎儿和附属物的重力,降低流产或者早产的发生率,明显延长孕周,改善妊娠结局<sup>[23-25]</sup>。本研究在术中采取的不可吸收编织线可以为患者的宫颈管提供比较牢固的维持力,能在术后帮助子宫承受胎儿及其附属物的重量,显著降低了宫颈的压力,有助于降低妊娠失败率<sup>[26-29]</sup>。本研究结果显示与期待疗法相比较,择期经阴道宫颈环扎术不但可以明显延长分娩孕周,提高成功妊娠率,还能降低早产的风险、促进胎儿胎内发育。但同时需要注意宫颈环扎术的绝对禁忌证包括绒毛膜羊膜炎、活动性的子宫出血、致死性胎儿畸形、胎膜早破、胎死宫内、有其他不适合胎儿生存的情形等。相对禁忌证胎儿生长受限、前置胎盘或低置胎盘等。宫颈环扎术的并发症会随着宫颈的扩张程度的增加和孕周的延长而增加,近期的并发症主要包括出血、胎膜早破、感染和流产等<sup>[30]</sup>。远期的并发症主要包括绒毛膜羊膜炎、宫颈管裂伤以及产褥感染等。因此,在开展经阴道宫颈环扎术之前,必须慎重地选择患者,术前需完善血常规、阴道分泌物和凝血四项等检查,术中的动作尽量轻柔,防止过分的牵拉宫颈,尽可能将手术对胎儿及子宫造成的刺激降为最低,且详细告知患者与其家属上述并发症的发生风险,尽量防止并发症的发生。

综上所述,与期待疗法相比较,择期经阴道宫颈环扎术不但可以明显延长宫颈机能不全患者的分娩孕周,提高成功妊娠率,还能改善新生儿的预后、降低早产的风险。

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