

· 论著 · 罕见病 ·

新生儿先天性膝关节脱位一例治疗及个案报道

胡美超 姚忠琦* 郝文杰 吕婧

赤峰市妇产医院康复科(内蒙古 赤峰 024000)

【摘要】目的 探讨中医手法治疗在先天性膝关节脱位(CDK)早期干预中的疗效及可行性。**方法** 本文报告了一例在我院(赤峰市妇产医院)接受治疗的先天性膝关节脱位患儿, 患儿为女性, 足月顺产, 出生体重3080g, 出生后即发现右膝关节反张, 诊断为先天性膝关节脱位。在患儿出生9小时后, 我科介入进行早期手法康复治疗, 主要采用中医的揉法、按法、拨法, 针对紧张的股四头肌进行松解, 并点按患侧风市、伏兔、梁丘、血海、箕门、足三里等穴位, 每次治疗30分钟, 每日2次。同时, 治疗结束后使用弹力绷带固定。**结果** 经过13天的治疗, 患儿右膝关节基本恢复正常, 无屈曲受限, 活动度与健侧无差别, 膝上皮肤褶皱基本消失。治疗第8天时, 患儿右膝已可屈曲90°, 并可平放于床面。患儿42日龄时进行膝关节及髌关节超声检查, 结果显示双膝未见明显异常, 髌关节超声显示右侧髌关节为Graf II a(+)型, 左侧髌关节亦在正常范围内。**结论** 本例先天性膝关节脱位患儿通过早期中医手法治疗, 取得了显著的疗效, 证明了中医手法在CDK早期康复治疗中的有效性和可行性。该方法无痛苦、无副作用, 操作简便, 为CDK的保守治疗提供了新的思路。未来可进一步探索中医手法在CDK治疗中的具体应用和长期效果。

【关键词】先天性膝关节脱位; 康复治疗; 中医

【中图分类号】R274.22

【文献标识码】A

DOI:10.3969/j.issn.1009-3257.2026.3.007

One Case of Neonatal Congenital Knee Dislocation for Treatment and Case Report

HU Mei-chao, YAO Zhong-qi*, HAO Wen-jie, LV Jing.

Department of Rehabilitation, Chifeng Obstetrics and Gynecology Hospital, Chifeng 024000, Inner Mongolia, China

Abstract: Objective To investigate the efficacy and feasibility of TCM manipulation in the early intervention of congenital knee dislocation (CDK). **Methods** This paper reports a case of congenital knee dislocation treated in our hospital. The child was female, born at term with birth weight of 3080g. After birth, the right knee joint was found and diagnosed as congenital knee dislocation. Nine hours after the birth of the child, our department intervened in early manual rehabilitation treatment, mainly using traditional Chinese medicine kneading method, according to the method, dialing method, for the tense quadriceps muscle release, and point according to the affected side market, Fu rabbit, Liangping Qiu, Xuehai, Jimen, Zusanli and other acupoints, each treatment for 30 minutes, twice a day. Meanwhile, elastic bandage was used after treatment. **Results** After 13 days of treatment, the right knee of the child basically returned to normal, without flexion limitation, the difference of mobility and the healthy side, and the skin folds of the knee basically disappeared. On Day 8 of treatment, the right knee was bent 90 and placed flat on the bed surface. Ultrasound of the knee and hip was performed at 42 days of age and showed no significant abnormalities in both knees, hip ultrasound of the right hip was Graf II a (+), and the left hip was within the normal range. **Conclusion** This child with congenital knee dislocation achieved remarkable effect through early TCM manipulation treatment, which proved the effectiveness and feasibility of TCM manipulation in the early rehabilitation treatment of CDK. This method has no pain, no side effects, and is easy to operate, providing a new idea for the conservative treatment of CDK.

Future research can further explore the specific applications and long-term effects of TCM manipulations in the treatment of CDK.

Keywords: Congenital Dislocation of the Knee; Rehabilitation; Traditional Chinese Medical Science

2024年5月31日在我院出生一例先天性膝关节脱位患儿, 我院康复科在患儿出生9小时后介入进行康复治疗, 现将病例报道如下。

病例: 患儿为一足月顺产女婴, 出生体重3080g, 无宫内窘迫史, 羊水清, 胎盘及脐带未见异常, 出生后即发现右膝关节反张(图1)。查体: 右膝关节反张, 过伸畸形, 右膝关节屈曲受限, 右侧股四头肌呈挛缩状, 触诊股四头肌紧张, 患膝上方可见皮肤褶皱。立即予完善膝关节X线, 提示右膝关节略过伸, 膝关节骨质未见异常(图2)。实验室检查未见异常。根据患儿症状、体征及辅助检查诊断为先天性膝关节脱位。患儿出生9小时后就诊于我科, 进行早期手法康复治疗。具体治疗: 予中医揉法、按法、拨法为主要手法, 松解紧张的股四头肌,

点按患侧风市、伏兔、梁丘、血海、箕门、足三里等穴位, 每次30min, 每日2次。治疗第8天后患儿右膝可屈曲90°, 基本可平放于床面, 每次治疗结束后予弹力绷带固定。治疗效果: 共治疗13天, 患儿右膝基本恢复正常, 无屈曲受限, 活动度与健侧无差别, 膝上皮肤褶皱基本消失(图3)。患儿于42日龄儿童保健完善髌膝关节超声, 膝关节超声示双膝未见明显异常; 髌关节超声示右侧髌关节 $\alpha=56^\circ$, $\beta=78^\circ$, 左侧髌关节 $\alpha=54^\circ$, $\beta=68^\circ$, 为Graf II a(+)型, 嘱患儿3月龄儿保复查。

先天性膝关节脱位(congenital dislocation of the knee, CDK)是一种婴儿非常罕见的先天性畸形, Jacobsen K^[1]等报道其发病率仅为成活婴儿的0.0017%, 主要表现为患侧膝关节过伸、膝关节屈曲受限, 股四头肌呈挛缩状, 髌胫束紧张, 膝关

【第一作者】胡美超, 女, 主治医师, 主要研究方向: 产后康复、儿童康复。E-mail: drhumeichao@myyahoo.com

【通讯作者】姚忠琦, 女, 住院医师, 主要研究方向: 儿童康复。E-mail: 826981700@qq.com

节呈半脱位或全脱位；本病可单独发病，也可伴发髋关节发育不良、先天性马蹄内翻足等^[2]。本病发病率女孩多于男孩；1978年在我国第一次由朱盛修报道^[3]。CDK的诊断多在婴儿出生后，通过外观明显的畸形、体格检查和常规的膝关节X线来确诊，也有部分在妊娠20周后可通过产前彩超发现^[4]。根据现有报道病例，先天性膝关节脱位既可以是孤立性病例，也会与一些先天性疾病共见，如先天性关节挛缩症、Larsen综合征、Escobar综合征、Grebe综合征等^[5-6]。本病例患儿为孤立性病例。

关于本病的发病原因，致病原因尚不明确争议很多。遗传因素：有文献报道本病有明确家族史，Cl Dungy, M Leupp等人报道^[7]双卵双胞胎同时出现膝关节脱位；在Provenzano对200例病例的回顾中，报道了7个家族有先天性膝关节脱位史^[8]。McFarland^[9]报道了一个家庭的病例，该家庭三个孩子来自三个不同的父亲，但三个孩子均患有先天性膝关节脱位。宫内因素：宫内空间不足或羊水过少均可造成本病，Niebauer和King报道了相关病例^[10]，此外也有人认为宫内体位受限，出生时臀位延长是造成本病的原因之一，宫内体位受限使关节过伸而不能恢复^[11-12]。关于造成本病的原因还有很多，包括前交叉韧带缺如或发育不良、肌性不平衡说、股四头肌纤维化挛缩、股骨下端骨骺畸形等^[13-15]。由此可见，CDK的致病原因可能为非单一因素。我们的病例产生原因亦不明，患儿母亲孕期检查一切正常，无羊水减少或宫内生长不良，家族也未曾出生相同或类似症状孩子。

M. Mehrafshan等^[16]通过对51例膝关节脱位病例进行分析，以复位和稳定性为标准，将先天性膝关节脱位分为3类。I型是易复位的CDK，当股骨髁通过屈曲时复位迅速，屈曲时保持稳定。II型是“顽固性”脱位，可复位但不稳定，一旦后前髁压力放松，就会发生反复脱位。III型是不可复位的脱位。还有一种基于膝关节屈曲程度的分类方法，当膝关节屈曲度超过90°时，归类为I型；当屈曲度在30°~90°之间时，归类为II型；当屈曲度小于30°时，归类为III型^[17]。

根据M. Mehrafshan等对先天性膝关节的分类，且本病例膝关节屈曲程度超过90°，故本病例属I型。

关于先天性膝关节的治疗，主要分为保守治疗和手术治疗两种^[18]。保守治疗现有报道以石膏矫形及Pavlik 挽具治疗为主，此外还有牵引、长腿屈膝位支具等；手术治疗包括软组织松解和骨性手术2方面，其目的是通过手术是膝关节复位，以达到恢复功能；保守治疗无效者可手术治疗，III型为手术适应症，治疗超过出生后一个月的病例，应考虑手术干预。保守治疗的石膏矫形存在耐受性差，不好清洗等缺点，现已用高分子绷带代替，但仍存在治疗周期长等缺点。

本病例生后9小时即进行康复干预，采用中医手法，通过揉法、按法、拨法舒筋活络，达到松解紧张肌肉效果，使过伸膝关节复位，用弹力绷带辅助复位，相较于传统疗法无痛苦无不适，无副作用，操作简便。就本例患者来说，通过手法治疗效果理想，治疗周期短，见效快，为CDK的保守治疗提供新思路。

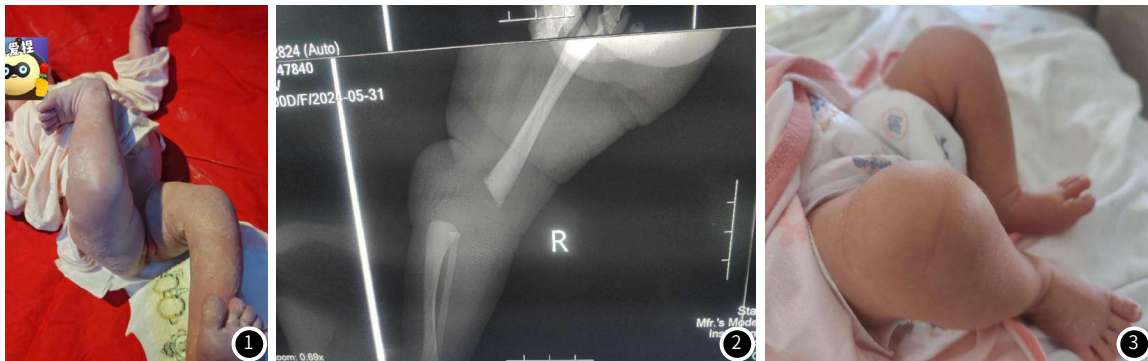


图1 刚出生时。图2 患侧膝关节X线。图3 治疗结束时。

参考文献

- [1] Jacobsen K, Vopalecky Y. Congenital dislocation of the knee[J]. Acta Orthop Scand, 1985, 56: 1-7.
- [2] Ellsworth K B, Dawkins J B, Perea H S, et al. Management of congenital dislocation of the knee[J]. Journal of the Pediatric Orthopaedic Society of North America, 2021, 3(3): 272.
- [3] 朱盛修, 陈景云. 先天性膝关节脱位五例报告[J]. 中华医学杂志, 1978, 58(6): 497-498.
- [4] Barber MA, Equiluz I, Plasencia W, et al. Prenatal features of genu recurvatum and genu flexum[J]. Int J Gynecol Obstet, 2009, 5(3): 267-268.
- [5] Bildner A. Prenatal sonographic detection of skeletal dysplasias: a case of Multiple Pterygium syndrome, or Escobar syndrome[J]. J Diagn Med Sonogr, 2014, 30: 205-210.
- [6] Al Kaissi A, Chehida FB, Ganger R, et al. Neonatal death dwarfism in a girl with distinctive bone dysplasia compatible with Grebe chondrodysplasia: analysis by CT scan-based phenotype[J]. J Clin Imaging Sci, 2014, 4: 53.
- [7] Dungy CI, Loupp M. Congenital hyperextension of the knees in twins[J]. Clin Pediatr Phila, 1984, 23: 169-172.
- [8] Provenzano RW. Congenital dislocation of the knee-report of a case[J]. N Engl J Med, 1947, 236(10): 360-362.
- [9] Mac Farland B. Congenital dislocation of the knee[J]. J Bone Joint Surg, 1929, 11: 281-285.
- [10] Niebauer JJ, King DE. Congenital dislocation of the knee[J]. J Bone Joint Surg Am, 1960, 42-A: 207-225.
- [11] Katz MP, Grogono BJS, Soper KC. The etiology and treatment of congenital dislocation of the knee[J]. J Bone Joint Surg (Br), 1967, 49: 112-120.
- [12] Laurence M. Genu recurvatum congenitum[J]. J Bone Joint Surg (Br), 1967, 49: 121-134.
- [13] Curtis BH, Fisher RL. Congenital hyperextension with anterior subluxation of the knee: Surgical treatment and long-term observations[J]. J Bone Joint Surg (Am), 1969, 51: 255-259.
- [14] Ooishi T, Sugioka Y, Matsumoto S, et al. Congenital dislocation of the knee: Its pathologic fractures and treatment[J]. Clin Orthop, 1993, 287: 187-192.
- [15] Bell MJ, Atkins RM, Sharrard WJW. Irreducible congenital dislocation of the knee: aetiology and management[J]. J Bone Joint Surg (Br), 1987, 69: 403-406.
- [16] Mehrafshan M, Wicart P, Ramanoudjame M, et al. Congenital dislocation of the knee at birth-Part I: Clinical signs and classification[J]. Orthop Traumatol Surg Res, 2016, 102: 631-633.
- [17] Abdelaziz TH, Samir S. Congenital dislocation of the knee: a protocol for management based on degree of knee flexion[J]. J Child Orthop, 2011, 5(2): 143-149.
- [18] 杨征, 鲁明, 郭源, 等. 先天性膝关节脱位的石膏矫形治疗[J]. 山东医药, 2011, 51(24): 10-11.

(收稿日期: 2024-12-05)

(校对编辑: 韩敏求)

(排版编辑: 刘潍嘉)