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论著

骨痂延长治疗儿童股骨化脓性骨髓炎后骨缺损及肢体短缩

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摘要:

目的:探讨外固定支架行骨痂延长治疗儿童股骨化脓性骨髓炎后骨缺损及肢体短缩的疗效。**方法:**采用外固定支架对19例儿童股骨化脓性骨髓炎后骨缺损及肢体短缩的患者行骨痂延长术,术前患肢平均骨缺损长度1.3 cm,患肢平均短缩4.8 cm。**结果:**所有病例随访21~82个月,骨不连接处全部愈合,骨延长区骨生长满意。骨延长4.5~8.0 cm,平均外固定指数39.7 d/cm。依据Paley的评定标准进行骨愈合评定,优为14例,良为5例;功能评定优为11例,良为8例。**结论:**外固定支架行骨痂延长是治疗儿童股骨化脓性骨髓炎后骨缺损及肢体短缩的可靠方法。

关键词: 外固定支架 骨缺损 肢体短缩 骨痂延长

Callus distraction in bone defect and leg shortening of femur after osteomyelitis

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Abstract:

Objective: To explore the efficacy of callus distraction performed by exaternal fixtor in the reconstruction of bone defect and leg shortening of femur after osteomyelitis. **Methods:** Nineteen child patients with bone defect and leg shortening after ostemomyelitis were treated by callus distraction with external fixator. The mean length of the bone defect was 1.3 cm. The mean leg-length discrepancy was 4.8 cm. **Results:** All patients were followed up for 21-82 months. The bone lengthening area grew well, the length of callus distraction was 4.5-8.0 cm, and the mean radiographic consolidation index was 39.7 d/cm. According to the Paley's criteria, the healing effect of 14 cases was excellent, and that of the rest 5 cases was good. The functional recovery of 11 cases was excellent, and that of the rest 8 cases was good. **Conclusion:** Callus distraction is a reliable method in the reconstruction of bone defect and leg shortening caused by ostemomyelitis.

Keywords: external fixator bone defect leg shortening callus distraction

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参考文献:

[1] Canale ST.Campbell's operative orthopaedics(Vol.3) [M] . 9th ed. Singapore: Harcourt Asia Mosby,2001.

[2] Paley D,Herzenberg JE,Paremain G,et al. Femoral lengthening over an intramedullary nail:a matched-case comparison with Ilizarov femoral lengthening [J] . J Bone Joint Am,1997,79(10): 1464-1480.

[3] Keating JF,Simpson AH,Robinson CM.The management of fractures with bone loss [J] . J Bone Joint Surg Br,2005,87(2): 142-150.

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[4] Takami H,Takahashi S,Ando M,et al. Vascularized fibular grafts for the reconstruction of segmental tibial bone defects [J]. Arch Orthop Trauma Surg,1997,116:404-407.

[5] 秦泗河,李刚. Ilizarov理论与技术的起源、发展与传播史 [J]. 中国骨与关节外科,2010,3(5):417-423. QIN Sihe,LI Gang. The origin,development and dissemination of Ilizarov theory and technology [J]. Chinese Journal of Bone and Joint Surgery,2010,3(5): 417-423.

[6] 闫飞,张湘生,王忠远,等. 镶嵌式外支架固定不植骨治疗骨不连 [J]. 临床骨科杂志,2010,13(5):515-517.

YAN Fei,ZHANG Xiangsheng,WANG Zhongyuan,et al. The treatment of bone nonunion with inlaid external fixation without bone graft [J]. Journal of Clinical Orthopaedics,2010,13(5):515-517.

[7] 黎志宏,张湘生,张庆,等.骨痂延长术治疗股骨大段骨缺损 [J].中南大学学报:医学版,2006,31(2):212-214.

LI Zihong,ZHANG Xiangsheng,ZHANG Qing,et al. Callotasis for segmental bone defects in the femur [J]. Journal of Central South University.Medical Science,2006,31(2):212-214.

[8] Kucukkaya M,Kabukcuoglu Y,Tezer M,et al. Management of childhood chronic tibial osteomyelitis with the Ilizarov method [J]. J Pediatr Orthop,2002,22(5):632-637.

[9] Dendrinos GK,Kontos S,Lyrtsis E.Use of the Ilizarov technique for treatment of non-union of the tibia associated with infection [J]. J Bone Joint Surg Am,1995,77(6): 835-846.

[10] 许建中,李起鸿,杨柳,等.骨外固定技术治疗复杂骨不连与骨缺损 [J].中华外科杂志,2002,12(4):280-283.

XU Jianzhong,LI Qihong,YANG Liu,et al. Treatment of complex bone nonunion with external skeletal fixation [J]. Chinese Journal of Surgery,2002,12(4):280-283.

[11] Zhang X,Liu T,Li Z,et al. Reconstruction with callus distraction for nonunion with bone loss and leg shortening caused by suppurative osteomyelitis of the femur [J]. J Bone Joint Surg Br,2007,89(11): 1509-1514.

[12] Liu T,Zhang X,Li Z,et al. Callus distraction for humeral nonunion with bone loss and limb shortening caused by chronic osteomyelitis [J]. J Bone Joint Surg Br,2008,90(6): 795-800.

[13] Paley D,Matz AL,Kurland DB,et al. Multiplier method for prediction of adult height in patients with achondroplasia [J]. J Pediatr Orthop,2005,25(4):539-542.

本刊中的类似文章

1. 丁仁奎; 王万春; 倪江东; 李桔元; 李跃峰; 张薇; .牛骨形态发生蛋白复合煅烧骨治疗骨缺损的实验研究[J]. 中南大学学报(医学版), 2001,26(6): 537-

2. 黎志宏 张湘生 张庆 彭丹. 骨痂延长术治疗股骨大段骨缺损 [J]. 中南大学学报(医学版), 2006,31(2): 212-214

3. 许春姣 郭峰 高清平 吴颖芳 蔡新春 彭解英. 骨髓基质十细胞与黄氏-壳聚糖/聚乳酸支架对犬牙周骨缺损再生的影响 [J]. 中南大学学报(医学版), 2006,31(4): 512-517

4. 刘彦宁¹, 刘森¹, 任鹏宇². 磷酸钙骨水泥/顺铂复合体体外药物缓释及体内抑瘤和修复骨缺损的实验研究[J]. 中南大学学报(医学版), 2009,34(10): 991-997

5. 沈奕, 王万春, 宋德业.颗粒性打压植骨在股骨缺损的髋关节翻修中的应用[J]. 中南大学学报(医学版), 2009,34(11): 1148-1150

6. 陶澄; 何爱咏; 倪江东; .大段冻干骨插入性植骨治疗长骨缺损[J]. 中南大学学报(医学版), 2003,28(5): 537-

7. 谢求恩, 何爱咏, 宋坤修.bFGF与VEGF复合磷酸钙骨水泥修复兔桡骨缺损的实验研究[J]. 中南大学学报(医学版), 2010,35(6): 622-

8. 李康华, 李宇晟, 李人杰, 林涨停, 雷光华, 廖前德.骨盆外固定支架结合有限内固定治疗TileB型骨盆骨折[J]. 中南大学学报(医学版), 2010,35(6): 630-

9. 兰松*, 刘运生.不同材料修补颅骨缺损的疗效分析[J]. 中南大学学报(医学版), 2004,29(3): 351-352

10. 胡懿郃; 李小如; .AAA骨与自体红骨髓复合移植治疗骨缺损[J]. 中南大学学报(医学版), 2000,25(2): 157-

11. 易伟宏; 卢畅; 周江南; 傅荫宇; 孙淑珍; 丁仁奎; .pBMP/MPTCP复合人工骨治疗骨缺损的实验研究[J]. 中南大学学报(医学版), 2001,26(3): 223-