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腓骨长肌腱前半部作为自体移植材料的临床研究

李丁峰,皇甫小桥,赵金忠

200233 上海交通大学附属上海市第六人民医院运动医学科

The clinical research on using the anterior half of the peroneus longus tendon as an autograft source

Li Dingfeng,Huangfu Xiaoqiao,Zhao Jinzhong

Department of Sports Medicine, Shanghai Sixth People's Hospital, Affiliated to Shanghai Jiao Tong University, Shanghai 200233, China

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摘要 目的 探讨腓骨长肌腱前半部（anterior half of the peroneus longus tendon，AHPLT）作为自体肌腱移植材料重建膝关节韧带的可行性及疗效。方法 2007年7月至2008年1月采用AHPLT作为自体肌腱移植材料的膝关节韧带损伤患者100例，男33例，女67例；年龄16~62岁，平均32.3岁。关节镜下内侧髌股韧带重建49例、多条韧带重建19例、后十字韧带双束重建18例和前十字韧带双束重建14例。切取AHPLT作为全部（49例）或部分（51例）重建材料，采用单切口或双切口技术，重建韧带用螺钉挤压固定。术后评估膝关节Kujala评分、Lysholm评分、Marx评分、国际膝关节文献委员会（International Knee Documentation Committee，IKDC）膝关节主观评估表和客观等级评定、踝关节足踝功能障碍指数（Foot and Ankle Disability Index，FADI）及美国足踝外科学会（American Orthopedic Foot and Ankle Society，AOFAS）评分。结果 92例获得2年以上随访。术后2年，不同韧带重建组患者膝关节IKDC主观评分、Kujala评分、Lysholm评分及Marx评分均高于重建术前。多条韧带重建、后十字韧带双束重建和前十字韧带双束重建术后IKDC客观等级评定结果达到正常及接近正常者分别为17例、15例和12例，优良率分别为89.5%（17/19）、93.7%（15/16）和100%（12/12）。全部患者手术前后AOFAS评分分别为（97.4±2.0）分和（97.2±1.6）分，FADI评分分别为（96.8±2.2）分和（96.9±2.5）分，差异均无统计学意义。患者均未出现腓神经损伤、腓骨长肌腱断裂等并发症。结论 AHPLT作为自体肌腱移植材料重建膝关节韧带具有操作可行性，近期临床疗效好，切取肌腱后对踝关节功能影响小。

关键词： 腱 移植 自体 膝关节 韧带 修复外科手术

Abstract： Objective To evaluate availability and outcomes of using anterior half of the peroneus longus tendon (AHPLT) in knee ligament reconstruction as an autograft source. Methods From July 2007 to January 2008, 100 patients with knee ligament injuries were recruited in this study. There were 33 males and 67 females aging from 16 to 62 years (mean, 32.3 years). 49 cases had undergone medial patellofemoral ligament reconstruction, 19 cases multiligament reconstruction, 18 cases double-bundle posterior cruciate ligament (PCL) reconstruction and 14 cases double-bundle anterior cruciate ligament (ACL) reconstruction. AHPLT was used as sole (49 cases) or part (51 cases) of reconstruction materials. One-incision or two-incision striping techniques were adopted to harvest AHPLT. Ligaments were fixed with screws. Post-operative assessments included Kujala knee score, Lysholm knee score, Marx knee score, International Knee Documentation Committee (IKDC) subjective evaluation form and objective evaluation grade, the Foot and Ankle Disability Index (FADI) and the American Orthopedic Foot and Ankle Society (AOFAS) scale. Results 92 cases were followed up for more than 24 months. Postoperative Kujala score, IKDC subjective score, Lysholm score and Marx score were improved significantly in all four groups of patients. According to IKDC objective evaluation grade, the number of patients reaching Grade A (normal) or Grade B (near-normal) in multiligament, PCL and ACL reconstruction were 17, 15 and 12, with an excellent rate of 89.5% (17/19), 93.7% (15/16) and 100% (12/12), respectively. Preoperative and postoperative AOFAS scores were 97.4?2.0 and 97.2?1.6, respectively, while the FADI scores preoperatively and postoperatively were 96.8?2.2 and 96.9?2.5, respectively. These results had no statistical significance. No signs of peroneal nerve injury or peroneus longus tendon rupture was found. Conclusion It is acceptable to use AHPLT as an autograft due to its feasibility to

harvest, good clinical outcome, and low rate of donor site morbidity at a minimum of two-year follow-up.

Key words: Tendons Transplantation, autologous Knee joint Ligaments Reconstructive surgical procedures

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作者简介: 赵金忠，E-mail: zhaojinzhongdoctor@163.com

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地址:天津市河西区解放南路406号天津医院内　邮编:300211
电话: 86-22-28334734 86-22-28278929 传真: 86-22-28241184 E-mail:gktougao@126.com