

doi: 10.13241/j.cnki.pmb.2015.17.025

中西医结合治疗桡骨远端骨折的临床分析 *

张 峰¹ 爃 军^{1△} 曹 斌¹ 李展奇¹ 陈明伟²

(1 陕西省西安市第四医院 陕西 西安 710004;2 西安交通大学 陕西 西安 710049)

摘要 目的:探讨中西医结合治疗桡骨远端骨折的临床治疗效果。**方法:**选取本院收治的桡骨远端骨折患者 60 例,将其随机分为对照组和实验组,每组 30 例。对照组采用切开复位钢板螺钉固定方法治疗,实验组采用切开复位钢板螺钉固定加局部中药外敷治疗。观察和比较两组患者的骨折愈合时间、腕部功能恢复情况以及临床疗效。**结果:**与对照组比较,实验组患者的骨折愈合时间明显缩短,患肢腕部功能明显改善,差异具有统计学意义($P < 0.05$);实验组的临床总有效率(76.66%)明显高于对照组(65.00%),差异具有统计学意义($P < 0.05$)。**结论:**中西医结合治疗桡骨远端骨折能够有效缩短骨折愈合时间,明显改善患者的腕部功能,值得临床推广。

关键词: 中西医结合疗法; 桡骨远端骨折; 切开复位钢板螺钉固定; 临床疗效

中图分类号:R683 文献标识码:A 文章编号:1673-6273(2015)17-3294-03

Clinical Analysis of Integrative Medicine in the Treatment of Distal Radius Fractures*

ZHANG Feng¹, DIE Jun^{1△}, CAO Bin¹, LI Zhan-qⁱ, CHEN Ming-w^e

(1 Fourth Hospital of Xi'an, Xi'an, Shaanxi, 710004, China; 2 Xi'an Jiaotong University, Xi'an, Shaanxi, 710049, China)

ABSTRACT Objective: To observe the clinical effect of integrative medicine on distal radius fractures. **Methods:** 60 patients with distal radius fractures admitted in our hospital were selected and randomly divided into the control group and experimental group, 30 patients were assigned in each group. The control group was treated by open reduction and plate and screw fixation method, while the experimental group was treated by open reduction and plate and screw fixation as well as local medicine topical treatment. The fracture healing time, recovery of wrist function and clinical efficacy were observed and compared between two groups. **Results:** Compared with the control group, the fracture healing time of experimental group was significantly shorter, the difference was statistically significant ($P < 0.05$), the wrist limb functional recovery of experimental group was significantly better, the difference was statistically significant ($P < 0.05$); the clinical efficacy of the experimental group was obviously higher (76.66% vs 65.00%), the difference was statistically significant ($P < 0.05$). **Conclusions:** Integrative medicine could effectively shorten the fracture healing time, improve the wrist function in the treatment of distal radius fractures, it was worth being popularized in clinic.

Key words: Integrative therapies; Distal radius fractures; Open reduction and plate and screw fixation; Clinical efficacy

Chinese Library Classification(CLC): R683 Document code: A

Article ID: 1673-6273(2015)17-3294-03

前言

桡骨远端骨折又称柯雷氏骨折,是临床骨伤科常见病和多发病^[1],临床常表现为腕部的肿胀、存在明显的压痛,伴有手以及腕部的活动受限。伸直型骨折有特别典型的餐叉状和枪刺样畸形,尺骨和桡骨的茎突在同一个平面上,用直尺试验发现为阳性。屈曲型的骨折畸形和伸直型完全相反^[2-4]。本病在临幊上以老年妇女较为多见,青壮年发病大多因为外伤暴力。据调查统计^[5],我国近几年桡骨远端骨折的患者每年以 0.12% 的速度增加,现代医学多采取手术治疗、药物治疗等疗法,但是临床效果不太明显。研究发现^[6-8],中医治疗方法和西医治疗方法能够

明显加快桡骨远端骨折愈合,改善其预后。本研究通过观察患者的骨折愈合时间、腕部功能恢复情况探究中西医结合疗法治疗桡骨远端骨折的临床疗效。

1 资料与方法

1.1 一般资料

选择 2013 年 9 月 ~ 2014 年 2 月我院骨科收治的桡骨远端骨折患者 60 例,按就诊顺序分为实验组与对照组。实验组 30 例,其中男 16 例,女 14 例,平均年龄(42 ± 5.5)岁;对照组 30 例,其中男 15 例,女 15 例,平均年龄(39 ± 8.4)岁。两组的患者的性别分布、年龄比较无统计学差异($P > 0.05$),具有可比性。

* 基金项目:国家自然科学基金面上项目(30672658)

作者简介:张峰(1979-),男,博士研究生,主治医师,主要研究方向:创伤、关节外科

△ 通讯作者:牒军(1970-),男,博士,副主任医师,主要研究方向:中医骨伤、关节外科

(收稿日期:2015-01-13 接受日期:2015-01-30)

1.2 桡骨远端骨折的诊断标准

桡骨远端骨折的诊断标准:有过外伤病史,多数是间接暴力造成的,受伤后腕关节附近可见肿胀,疼痛,前臂下端的畸形,有明显压痛感,腕臂的活动功能有障碍;通过X线摄片检查可明确诊断。

1.3 病例纳入及排除标准

纳入符合《中医病证诊断疗效标准》确诊为桡骨远端骨折的患者;患者自愿参与这次实验,并签署了知情同意书。排除恶性肿瘤、严重心脑血管疾病、严重肝肾功能障碍、神志异常以及有特殊疾病的患者。

1.4 治疗方法

1.4.1 对照组 采取切开复位钢板螺钉固定进行治疗。麻醉方法采取臂丛神经麻醉,手术过程出血用止血带止血,彻底清除骨折伤口处,手术需在桡骨骨干外侧距离桡骨骨折约3-5 cm处行纵切口,长度约3 cm,在暴露桡骨骨干的过程中,要注意避免是桡神经浅支受损,直视下平行放入2枚70/20 mm Schanz钉在桡骨骨干正中位置,然后在第二掌骨基底做个切口,直视下放入2枚70/20 mm Schanz钉,安装好支架,使它的长度能够控制关节和腕关节松开,X线下透视进行闭合牵引复位,在骨折稳定位置,将原来放松的关节锁紧。手术时间45-75 min。术后开始进行手指屈伸,并行腕颈吊带悬吊于前臂。

1.4.2 实验组 采用切开复位钢板螺钉固定加局部中药外敷进行治疗。切开复位钢板螺钉固定方式与对照组手术方法相同,但在固定后进行中药止痛消肿膏药进行外敷,主要成分:制

乳香、骨碎补、苏木、生川乌、自然铜、红花、生草乌、制没药、丁香、石膏、马钱子等各取5克进行研磨为细末状态,用凡士林搅拌均匀,涂匀在纱布上,敷在骨折部位,用纱布来进行包扎和固定。保持4-5周,分别在术后3天、1周、4周复查X线片。观察骨折的愈合时间、腕关节功能情况。

1.5 观察指标

1.5.1 骨折愈合时间 在患者治疗前做好日期的标注和治疗后的日期,运用X线摄片监测骨折的愈合程度。

1.5.2 腕部功能恢复情况 治疗后测定两组患者腕关节的疼痛感、活动限度、功能、掌屈或背伸减少角度。

1.6 疗效判定标准

参照《实用骨科运动损伤临床诊断标准》:愈合优:①骨折线消失,无畸形;②关节活动自如;愈合良好:①骨折无畸形;②关节活动轻微受限;愈合尚可:①骨折无畸形;②关节活动受限;愈合差:①骨折有畸形;②关节活动很受限。

1.7 统计学方法

实验数据输入到SPSS17.0统计学分析软件包,计数资料采用t检验,率的比较采用卡方检验,以P<0.05为差异具有统计学意义。

2 结果

2.1 两组临床疗效的比较

实验组的总有效率明显高于对照组,差异有统计学意义(P<0.05),如表1。

表1 治疗后两组患者的临床疗效比较

Table 1 Comparison of the clinical efficacy between two groups

Group	n	Excellent	Effective	Good	Invalid	Total efficiency (%)
Experimental group	30	8	15	5	2	76.66*
Control group	30	6	12	8	4	60.00

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

2.2 两组平均骨折愈合时间的比较

实验组的平均骨折愈合时间明显短于对照组,差异有统计

学意义(P<0.05),如表2。

表2 两组治疗后的骨折愈合时间比较(± s)

Table 2 Comparison of the fracture healing time after treatment between two groups(± s)

Groups	The average healing time (months)	P	t
Experimental group	5.92± 3.25*	0.024	2.236
Control group	9.53± 2.83		

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

2.3 两组腕关节功能恢复情况的比较

治疗后,与对照组比较,实验组腕关节功能恢复总有效率

显著升高,差异有统计学意义(P<0.05),如表3。

表3 两组治疗后腕关节功能恢复情况的比较

Table 3 Comparison of the wrist function recovery after treatment between two groups

Groups	n	No damage	Obvious recovery	Weakness	Blunted	Efficiency (%)
Experimental group	30	16	9	3	2	83.34
Control group	30	10	8	3	3	60.00

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

3 讨论

桡骨远端骨折是急诊科常见的伤病,为发生于前方肌近侧缘以远部位的骨折。我国目前已逐渐进入人口老龄化社会,骨质疏松的发生率呈逐年上升趋势^[9]。有研究表明,患者治疗后均接受抗炎治疗,但这种方法并没表现出对骨折愈合有很大的促进作用,骨折愈合的时间越久,给患者带来的困扰越大^[10]。有研究显示,中药外敷能够明显的增强骨折的疗效,同时能够缩短骨折愈合时间和恢复腕关节的功能^[11]。另有文献报道^[12]中药外敷能够作用于骨,促使骨痂形成快、骨质快速生长、骨代谢旺盛。自然铜、骨碎补、苏木中药直接作用于骨,加快骨痂的生长,促进骨质生长,加快骨代谢。其中,自然铜中的顺磁物质可以导入骨折端,能提高局部的氧气含量,同时有利于成骨细胞的活动和胶原的形成,使骨折愈合的速度加快同时更加坚固^[13-15]。制乳香、红花、制没药、丁香具有调气活血,定痛化瘀的作用,能够有效的缓解疼痛^[16]。

本研究采用切开复位钢板螺钉固定加局部中药外敷治疗桡骨远端骨折。中药外用复方主要成分为石膏、苏木、生川乌、自然铜、制乳香、红花、制没药、生草乌、丁香、骨碎补、马钱子。其中,骨碎补能够活血续伤,补肾强骨,消肿止痛、续筋接骨,入肾经得以治骨,能治骨伤碎裂而得名,为伤科中的要药,配伍没药、自然铜等,能够更好的加强疗效;乳香辛、苦、温,没药苦平,都归心肝脾经,又能够活血止痛,消肿生肌,为君药;马钱子散血通经,消肿止痛,为臣;佐药用自然铜益肝补肾,续筋接骨;丁香为使药辛香定窜,行气止痛,引药到病所^[17-19]。君臣佐使,相辅相成,治疗骨折有较好疗效^[20]。本研究结果显示患者平均骨折愈合时间较单用切开复位钢板螺钉固定明显缩短,患肢腕部功能恢复效果和临床疗效均明显优于单用切开复位钢板螺钉固定,表明中药外敷能够加快骨折的愈合,促进腕部功能恢复。

综上所述,采用切开复位钢板螺钉固定加局部中药外敷治疗桡骨远端骨折的临床效果好,不仅能够减少患者骨折愈合时间,还可以促进肢腕部功能的恢复,值得临床推广。

参考文献(References)

- [1] Suganuma S, Tada K, Tsuchiya H. Reducing the risk of flexor pollicis longus tendon rupture after volar plate fixation for distal radius fractures: validation of the tendon irritation test [J]. European journal of orthopaedic surgery & traumatology, 2014, 24(8): 1425-1429
- [2] Tarallo L, Mugnai R, Adani R. Malunited extra-articular distal radius fractures: corrective osteotomies using volar locking plate[J]. Journal of orthopaedics and traumatology, 2014, 15(4): 285-290
- [3] Tarallo L, Mugnai R, Adani R. A new volar plate made of carbon-fiber-reinforced polyetheretherketone for distal radius fracture: analysis of 40 cases [J]. Journal of orthopaedics and traumatology, 2014, 15(4): 277-283
- [4] Wichtlas F, Haas NP, Disch A. Complication rates and reduction potential of palmar versus dorsal locking plate osteosynthesis for the treatment of distalradius fractures [J]. Journal of orthopaedics and traumatology, 2014, 15(4): 259-264
- [5] Shukla R, Jain RK, Sharma NK. External fixation versus volar locking plate for displaced intra-articular distal radius fractures: a prospective randomized comparative study of the functional outcomes[J]. Journal of orthopaedics and traumatology, 2014, 15(4): 265-270
- [6] Roh YH, Lee BK, Noh JH. Factors associated with complex regional pain syndrome type I in patients with surgically treated distal radius fracture [J]. Archives of orthopaedic and trauma surgery, 2014, 134 (12): 1775-1781
- [7] Kocjan R, Finzel S, Englbrecht M. Differences in bone structure between rheumatoid arthritis and psoriatic arthritis patients relative to autoantibody positivity[J]. Annals of the rheumatic diseases, 2014, 73 (11): 2022-2028
- [8] Scherrer MJ, Rochat MK, Inci D. Reference equations for ultrasound bone densitometry of the radius in Central European children and adolescents[J]. Osteoporosis international, 2014, 25(11): 2617-2623
- [9] Parkar A, Marya S, Auplish S. Distal radius triplane fracture[J]. Annals of the Royal College of Surgeons of England, 2014, 96(8): 6-7
- [10] Matzon JL, Kenniston J, Beredjiklian PK. Hardware-related complications after dorsal plating for displaced distal radius fractures [J]. Orthopedics, 2014, 37(11): e978-982
- [11] Daneshvar P, Chan R, MacDermid J. The effects of ulnar styloid fractures on patients sustaining distal radius fractures [J]. Journal of hand surgery, 2014, 39(10): 1915-1920
- [12] Liu J, Wu Z, Li S. Should distal radioulnar joint be fixed following volar plate fixation of distal radius fracture with unstable distal radioulnar joint? [J]. Orthopaedics & traumatology, surgery & research, 2014, 100(6): 599-603
- [13] Porrino JA, Maloney E, Scherer K. Fractures of the distal radius: postmanagement radiographic characterization [J]. American Journal of roentgenology, 2014, 203(4): 846-853
- [14] Curtin CM, Hernandez-Boussard T. Readmissions after treatment of distal radius fractures [J]. Journal of Hand Surgery, 2014, 39(10): 1926-1932
- [15] Scola A, Scola E. Bone resorption in posttraumatic dystrophy. Root cause analysis based on the literature[J]. Der Unfallchirurg, 2014, 117 (10): 957-961
- [16] Farmer S, Malkani A, Lau E. Outcomes and cost of care for patients with distal radius fractures[J]. Orthopedic, 2014, 37(10): e866-878
- [17] Trehan SK, Orbay JL, Wolfe SW. Coronal Shift of Distal Radius Fractures: Influence of the Distal Interosseous Membrane on Distal Radioulnar Joint Instability[J]. Journal of Hand Surgery, 2014 Oct
- [18] Knudsen R, Bahadirov Z, Damborg F. High rate of complications following volar plating of distal radius fractures [J]. Danish Medical Journal, 2014, 61(10): A4906
- [19] Koelink E, Boutis K. Paediatrician office follow-up of common minor fractures[J]. Paediatrics & Child health, 2014, 19(8): 407-412
- [20] Ekrol I, Duckworth AD, Ralston SH. The influence of vitamin C on the outcome of distal radial fractures: a double-blind, randomized controlled trial [J]. Journal of bone and Joint Surgery (American volume), 2014, 96(17): 1451-1459