

论 著

# 采用中西医结合方法提高腰间盘突出症手术治疗效果

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**摘要** 腰椎间盘突出症的手术治疗并不困难,但由于适应症把握不严,定位诊断不准确,术式欠妥或技术失误等原因致部分病例术后症状不能缓解需再次手术。为提高手术疗效,选择手术适应症,并在术中术后应用中药和早期功能锻炼等措施,取得了较好效果。共作 110 例,无 1 例再次手术,优良率达 98.1%。

**关键词** 腰间盘突出 手术适应症 中西医结合治疗

1984 年以来,本院共治疗腰间盘突出症 422 例,其中手术治疗 110 例。为提高疗效,除严格掌握手术适应症外,术中术后应用中药及早期功能锻炼,取得了较好效果,报道如下。

## 临床资料

本组 110 例中男 77 例,女 33 例,年龄 22~60 岁;有明显外伤史(弯腰搬物、扭腰)者 82 例,全部病例均有 2 次以上复发史;病程最短 1 个月,最长半年;术前均经保守治疗 1~3 个月而症状未减;主要临床症状及体征有:腰腿痛 110 例,脊椎侧弯 81 例,直腿抬高试验阳性者 92 例(<30°者 51 例、<50°者 24 例、<70°者 17 例),拇趾背伸力减弱 78 例,小腿外侧或足背痛觉减退 74 例。脊髓造影 50 例(手术符合率 96%),CT 检查 58 例(手术符合率 98%),核磁共振 2 例(手术符合率 100%)。

## 治疗方法

1. 术前定位诊断要明确。术前 1 天以美兰 1~2ml 注入病变棘突或贴铅字拍 X 片确定。

2. 患者取俯卧位,半侧椎板切除(术前已明确有椎管狭窄者则作全椎板切除)。探查间盘突出位置及其它病变,黄韧带全部切除,间盘突出处多见有丘状突起,切开后取出突出间盘组织,并伸入至该椎间隙,将破裂的纤维环及残余髓核取出,间盘突出处的黄韧带外缘多有增厚变性改变,往往与破碎的纤维环粘连一起,压迫硬膜囊、及神经根,宜小心清除之。伴有侧隐窝及椎间孔狭窄者扩大侧隐窝及椎间孔。直视下

游离松解神经根。术中严密止血,若有渗血用一明胶海绵覆盖。术毕用一导尿管沿椎管硬膜间隙上、下端通畅无阻,脊髓搏动正常,注入 10% 川芎嗪注射液 10ml 于椎管硬膜间隙内,拔除尿管,置负压引流管,分层缝合创口。

3. 术后第 2 天开始服用补益肝肾活血化瘀方:熟地 山茱萸 山药 丹皮 泽泻 云苓 狗脊 当归 赤白芍 川芎 桃仁 红花 木瓜 伸筋草 土鳖虫。每日一付,服用 2~4 周。

4. 术后第 3 天开始背伸肌锻炼,髋、膝伸屈活动,术后 1 个月下地活动,不弯腰。

## 疗效

本组随访 8 个月~10 年,平均 6 年 8 个月。

优:疼痛完全消失,恢复正常生活及工作,共 89 例;良:疼痛基本消失,可恢复正常生活及工作,偶有腰部隐痛 19 例;可:疼痛较术前明显减轻,工作及生活受到一定限制 2 例。

## 讨论

1. 手术适应症:(1)反复发作腰腿痛(至少 2 次以上),并经 1~3 个月的系统保守治疗无效者。(2)临床症状及体征典型。(3)影像学检查为巨大性突出(突出物>椎管矢状径 1/4,硬膜囊受压)或伴有侧隐窝狭窄(<5mm)及腰椎管狭窄(<椎管矢状径 16mm),黄韧带肥厚(>3mm)及钙化等。

2. 手术技术:(1)关于双间隙间盘突出问

题,Armstrong 报道 1000 例中有 107 例为双间隙突出<sup>[1]</sup>,故这类患者应根据术前检查,术中要探查双间隙,以免只摘除 1 处,遗漏他处,残留症状。本组遇有 8 例为双间隙间盘突出,均作了双间隙的间盘摘除。(2)腰间盘突出同时伴有侧隐窝狭窄者,文献报道发生率高达 56%<sup>[2]</sup>,本组共 41 例均作了相应的侧隐窝扩大术。(3)为维持术后脊柱的稳定,本组除伴有椎管骨性狭窄者施行棘突及全椎板切除外,均为病侧半侧椎板切除术,此术式不会破坏脊柱的稳定。(4)术中止血应彻底,否则术后血肿大可压迫硬膜囊及马尾,血肿机化后亦可造成后遗症。本组术中严密止血,有渗血者用明胶海绵覆盖,术后应用负压引流,以减少血肿形成。(5)为防止术后粘连,在手术完成后注入椎管内 10% 川芎嗪注射液 10ml<sup>[3]</sup>。

3. 术后早期背伸肌及下肢肌力功能锻炼,有助于改善循环,减轻及防止粘连,恢复肌张力及弹性,使脊柱获得稳定,防止复发。内服药系沿用六味地黄汤以补益肝肾、除湿利水,配合活血药物及舒筋活络药物等。对腰间盘术后强筋壮骨、增强体质、舒通经络、消除组织水肿及防止粘连等均有不可忽视的作用。

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# 钢丝穿孔环扎术固定锁骨的生物力学分析

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**摘要** 根据锁骨的解剖学及骨折类型分布特点,研究设计了钢丝穿孔环扎术固定锁骨骨折的方法,即在骨折端两侧缘分别穿 2 孔,孔孔相对,用直径 0.3mm 钢丝穿孔后进行环扎固定,经与克氏针穿针固定在生物力学方面的比较,认为钢丝穿孔环扎具有抗弯、抗扭强度大的优点,讨论了钢丝穿孔环扎术的作用机制。

**关键词** 钢丝穿孔环扎术 锁骨

作者根据锁骨的解剖特点及骨折类型的分布特点,提出了钢丝穿孔环扎术,经生物力学实验证实较克氏针具有一定的优越性,现报道如下。

**材料与方 法**

1. 湿尸锁骨 24 根,随机分为对照组,克氏针穿针固定组,钢丝穿孔环扎固定组等三组。每组 8 根湿尸锁骨。

2. 对照组不作任何处理。实验组在锁骨中段人为制成 45° 斜型骨折,分别采用临床上最常用的直径为 2.0mm 克氏针穿针固定和直径 0.3mm 钢丝穿孔环扎固定,即在骨折端两侧缘

分别钻 2 孔,孔孔相对,然后用已选定的钢丝穿孔,骨折端对合后进行环扎固定,环扎在骨折两端分两组进行每组环扎圈数为 2 圈。三组锁骨分别在骨两端用牙托粉制成 3×3×3cm 立方体平台,以便进行加载。三组分别在 SWD-10 型万能实验机和 NJ—50B 型扭转试验机上进行抗弯、抗扭转实验,测定其抗弯强度和扭转强度。

**实验结果**

对照组在抗弯强度和扭转强度高于实验组。实验组中钢丝穿孔环扎固定组各项指标均高于克氏针穿针固定组(见表 1、2)

## Abstract of Original Articles

### **Application of integration of TCM and modern medicine in elevation of operative effect in treating prolapse of lumbar intervertebral disc**

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Operative treatment of prolapse of lumbar intervertebral disc is not difficult, but reoperation of part of the cases were carried out due to improper master of indication, incorrect localization, improper operative style or technical fault ect. In elevation of operative therapeutic result, better effects were obtained after proper indication being mastered, applying Chinese herbs postoperatively and early physical exercise being used. One hundred and ten cases were operated, no one case needs reoperation. The rate of excellent and good was 98.1%.

**Key words** Prolapse of lumbar intervertebral disc Indication of operation Integration of traditional Chinese and modern medicine

### **An analysis on biomechanics in fixation of fracture of clavicle with steel wire perforating and annular ligating method**

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Based on characteristics of anatomy and types of fracture of clavicle, steel wire perforating annular ligating method was designed, i. e. two wholes at one level were perforated on two ends of fractured clavicle, then a diameter of 0.3mm steel wire was passed through them and fixed with annular ligation, And it was compared with Kirschner's pin based on biomechanics. It was realized that the former bears advantages of antiwinding effect and anti-torsion strength. The mechanism of steel wire perforating annular ligating method was discussed.

**Key words** Steel wire perforating annular ligating method Clavicle

### **Experimental observation of rabbit osteo myelitis treated with Sheng Ji Xiang Pi Gao chain**

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Models of chronic osteo myelitis in bilateral upper epiphyseal end of tibia of the rabbits were treated with debridement of the lesion, then Sheng Ji Xiang Pi Gao chains were implanted in the left bone marrow, the right side served as control. Through gross and pathological slice observation, the results showed that there were less and quick disappearance of blood clot within the marrow, and the granulation grew abundantly and healthy, very less formation of multiple abscesses in the experimental side. The local pus formation as increased on the experimental side, it was most prominent at 5th-10th day. The pus was decreased immediately after removal of the chain, then the wound was healed afterwards.

**Key words** Sheng Ji Xiang Pi Gao chain Chronic myelitis Rabbit

**Motive study of fibrin binding protein in wound healing-Mechanism of Wei Nong Zhang Rou (IV)**

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Thirty-two rabbits were selected to make infected wound surface models to observe the motive changes of fibrin binding protein and contents of it at the wound surface, and the influence of external application of Chinese herbs. The results of experiment indicated that there were positive correlation of fibrin binding protein and wound surface healing time, but there were evident negative correlation with wound fibrin. Application of Chinese herbs can elevate prominently in wound surface fibrin, there were significant difference( $P < 0.01$ ) as compared with the control. This suggested that external application of chinese herbs is a good regulation of wound surface fibrin. It can elevate contents of wound surface fibrin, increase local anti-infective and repairing ability of injury and reach the aim of accerelate wound healing.

**Key words** External application Chinese herb Fibrin binding protein Wound healing

**Thirty nine cases of fracture of clavicle treated with fixator**

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Thirty nine cases of fracture of clavicle were treated with self-designed fixator with better results. Among them, three cases were failure due to operation and another therapeutic method had to be used. Thirty six cases were discharged at 4th-6th week postoperatively. Among them, 8 cases were reduced anatomically, 16 cases near anatomically, one case had displacement evidently, and one was mild dislocated, with a rate of excellent and good of 89.2%. A follow-up of 3 months to 3years postoperatively were carried out, all cases were healed in good condition. Two bone holding forceps were used to hold the fractured ends of two sides subcutaneously, then moved the forcep according to the position of two ends, regulating the screw to check if any displacement was found to obtain accurate reduction. The fixator was fixed on the chest wall by means of crossed wood splint and pressed-screw action. Due to the instrument is light and small, so it wouldn't influence the patient to wear clothes and action. Exercise was taken to improve healing. It was due to strong fixation, so it offers a googcondition in bone healing.

**Key words** Fracture of clavicle External fixator External fixation