

(1)轻度不稳定:日常行走,快步行走无不稳定,上下楼梯也无困难,而在跑步急停或急转弯时,才有不稳定感觉,抽屉试验时,胫骨近端向后移位 $\leq 5\text{mm}$;(2)中度不稳定:日常行走无不稳定感觉,上下楼梯时有不稳定感觉,应力下胫骨髁向后移位 $5\sim 10\text{mm}$;(3)重度不稳定:日常行走就感不稳定,在应力下抽屉试验时,胫骨髁向后移位 $> 10\text{mm}$ 。轻度不稳定的病例用非手术治疗,股四头肌及腓绳肌锻炼。中度及重度不稳定者则以手术治疗;本文报告的 5 例即属此,经腓肠肌内侧头部分移位重建后交叉韧带,获得良好疗效。

在修复旧的膝关节不定时,应考虑不要造成新的功能缺失。腓肠肌的主要功能是使足跖屈,在站立时固定踝关节防止身体前倾。不论是腓肠肌的内侧头或是外侧头被切除后失去的功能,可由另一头及比目鱼肌代偿。至今文献所报道的病例,尚无严重的并发症^[3]。用腓肠肌内侧头替代膝关节后交叉韧带,腓肠肌内侧头肌腱的止点虽部分移位,但基本接近原有的解剖排列,腓肠肌内侧头的屈膝功能仍保留。其移位的 $1/3\sim 1/2$ 内侧头的肌腱方向基本接近后交叉韧带方向,这样便代偿了后交叉韧带的功能。

膝关节损伤的程度、操作者的精熟程度与疗效紧密相关。是否作了全面修复以及晚期修复无从达到原

有的位置及功能等都直接影响手术效果。修复韧带固定时位置应适当,尤其应注意缝合时膝关节应处在不前不后的正常位置。术毕石膏固定时体位维持不妥,人为地造成向前或向后移位、术后的锻炼及训练不力、肌力乏弱等,都直接影响疗效。

手术之前需向患者讲明:术后仍会出现阳性体征,而且移位的动力组织只有通过患者自我训练适应,才能学会如何使其发挥作用。

本组 5 例病人术后抽屉试验均仍呈阳性,这是由于试验时膝关节屈曲 90° ,腓肠肌处于松弛状态之故。而在行走时,腓肠肌必然进行收缩活动,膝关节的屈曲程度也变小,腓肠肌替代后交叉韧带的功能就呈现出来。根据我们的随访资料,一般在术后半年后才逐渐感到手术的效果。

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胫骨髁间前嵴撕脱骨折的治疗

河南洛阳铁路医院(471002) 薛玉阳 孙绍文 张松枝

摘要 本文报告了胫骨髁间前嵴撕脱骨折 8 例,平均年龄 14 岁。我们将此分为三型;2 例行保守治疗,6 例行切开复位钢丝内固定。随访 8 例均获得了骨性愈合,关节功能基本正常,效果满意。着重介绍了分型及手术方法,并就该手术的优点及早期诊断和损伤机制进行了讨论

关键词 胫骨 骨折 手术

胫骨髁间前嵴骨折较少见,现就我们诊治的 8 例报道如下:

临床资料

本组 8 例,均为男性;年龄 $12\sim 16$ 岁;左侧 5 例,右侧 3 例;5 例骑自行车摔伤,2 例从牛背上跌伤,1 例膝部扭伤;本组 I 型和 II 型骨折各 1 例,均采用石膏固定保守治疗,III 型骨折 6 例,采用手术治疗。术中见前交叉韧带附着处撕脱骨片最大的 $3\times 1.5\text{cm}$,最小的 $1.5\times 1.0\text{cm}$,骨折片厚度 $0.5\sim 1.3\text{cm}$,合并内侧半月板前角撕裂者 2 例。

治疗方法

I 型和 II 型骨折各 1 例,先行石膏托固定,抬高患

肢,1 周后更换管型石膏,5 周后去石膏行功能锻炼。III 型骨折 6 例,行切开复位用钢丝作内固定。手术方法:采用硬膜外麻醉,取膝关节前内侧切口入路显露膝关节,将髁骨向外侧牵开,探查交叉韧带,半月板及髁间前嵴撕脱骨块大小,将骨折片试行复位,在胫骨结节内侧 $2\sim 3\text{cm}$ 胫骨内髁处,将自制带钩状克氏针(见图 1)用电钻向上向后对准髁间前嵴骨折片处钻出二条平行的隧道,将钢丝从骨折片二孔穿出,钢丝二端分别用带钩状克氏针从相应隧道引出至胫骨内髁处,将骨折片复位满意,拉紧钢丝固定(见图 2)。术后石膏托外固定 2 周,拆线后更换管型石膏,4 周后去石膏行膝关节功能练习。术后根据 X 光片显示骨折愈合情况,在术后半

年~1 年去除内固定,只在胫骨内髁处局麻下切开一小口,找出钢丝抽出即可。

治疗结果

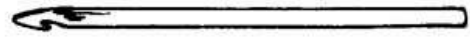
1 年后随访,8 例骨折块均骨性愈合,1 例膝关节伸直较健侧差 15 度,2 例走路久或活动量大时有酸痛感,余 5 例无膝关节疼痛及压痛,关节活动正常。全部 8 例麦氏征、浮髌试验及抽屉试验均阴性,无肌萎缩及关节不稳现象,效果满意。

讨论

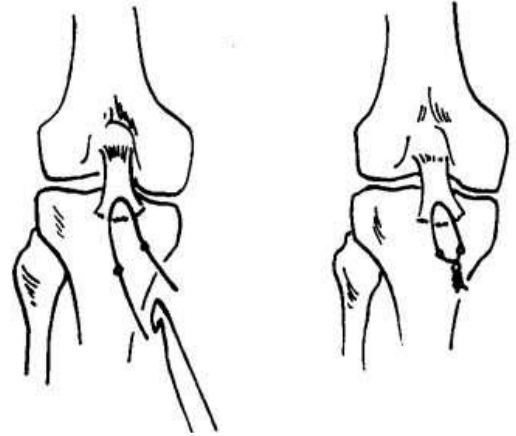
1. 早期诊断问题:该病早期症状不甚突出,甚至关节可活动及负重走路,易延误诊断。早期诊断要点:(1) 如有胫骨髁间前嵴骨折,其肿胀及疼痛较一般扭伤为重,且关节内有积血,可出现浮髌试验(+);(2) 伤后病人有关节松弛失稳现象,(3) 膝关节半屈曲位,胫骨向前牵拉下拍侧位 X 光片可见胫骨向前移位及髁间前嵴随交叉韧带牵拉向后上撬起或移位影像。

2. 损伤机制和分型:受伤时膝关节半屈曲位,小腿外旋或外展使交叉韧带受到严重牵拉,若在成人则发生交叉韧带损伤,在青少年胫骨髁间嵴未完全骨化,对抗张力强度比韧带差。因此韧带牵拉其附着点造成软骨板下松质骨撕裂骨折,拉力重者骨折片随韧带移位。我们根据 X 光片及术中所见分为 III 型:I 型为胫骨髁间前嵴骨折,仅能看到骨折线而且无移位;II 型为骨折片前缘撬起,但后缘仍与胫骨相连,侧位片看似鸟咀状;III 型为骨折片完全与胫骨分离或有移位。

(3) 治疗方法:该病治疗方法较多,无移位者多行保守治疗。对分离移位明显者,有螺丝钉固定或粗丝线



附图 1 自制带钩状克氏针



附图 2 用带钩状克氏针将钢丝两端引出,

抽紧钢丝两端扭紧固定缝合固定等。用螺丝钉固定骨折片,使钉尾在关节内异物偏大,有可能影响功能练习,另外取钉时需再次进入关节。粗丝线固定因其不太结实,在骨折片未愈合前关节活动或磨擦易造成丝线断裂,影响手术效果。本组对 III 型患者的手术治疗,用细钢丝固定,牢靠、确实,不太影响关节活动,取钢丝时在胫骨内髁处切一小口抽出即可,避免再次进入关节,是其优点。另外,对半月板损伤严重者可同时行半月板切除;本组 2 例半月板前角撕裂,均未切除,用丝线缝合修补,这对维持关节的稳定及功能均有益处。 (收稿:1994-09-06)

改良的 Stimson 法整复髌关节脱位

西安医科大学第二临床医学院(710004) 史明起 党晓谦 王坤正 王有全

摘要 本文报告了 74 例外伤性髌关节后脱位,按作者设计的 Stimson 改良法进行手法复位,取得了满意的临床效果。本文详细地介绍了复位方法,并论述了本法的优点。

关键词 外伤性髌关节后脱位 stimson 改良法。

外伤性髌关节后脱位(Traumatic Posterior Dislocation of the Hip 以下简称 TPDH)以往多采用 Allis 法、Bigelow 法和 Stimson 法进行复位,笔者在临床实践中对 Stimosn 法加以改良^[1],从 1982 年至今用改良的 Stimson 法治疗 TPDH 患者 74 例,效果显著,报导如下。

临床资料

74 例中男 57 例,女 17 例;左髌 31 例,右髌 43 例;农民 29 例,工人 23 例,干部 13 例,学生 9 例;年龄 5 岁~69 岁,其中 5~20 岁 9 例,21~50 岁 54 例,51~69 岁 11 例;伤后就诊时间,24 小时以内 51 例,24~72 小时 21 例,4~6 天 2 例;致伤原因:塌方受压 7 例,高处

English Abstract

Radiographic findings of derangement of atlanto—axial joint

Institute of Orthopaedics and Traumatology, China Academy of TCM(100700)

Based on the radiographic study and analysis of atlanto—axial joint of normal and abnormal, we consider that the derangement of atlanto—axial joint can be diagnosed as: the difference of bilateral distance between the dens and the lateral mass is larger than 1mm, the difference of central sagittal line of dens and atlas is larger than 1mm; there is an abnormal movement of atlanto—axial joint on the X—ray film of open mouth with 15° rotation; and the patient bears the symptoms and signs of cervical spondylosis.

Key words Atlanto—axial joint Derangement of atlanto—axial joint X—ray film

(original article page 3)

Tension band and circular fixation in treating patellar fracture

Second Affiliated Hospital Of Xian University of Medical Science(710004)

Sixty five cases of fracture of patella were treated with tension band, circular fixation with stainless steel and circular fixation with silk thread, the average rate of excellent and good being 91.52%. In the excellent group, the tension band group was 80%, and the stainless steel and silk thread group being 56% and 56.5% respectively. Due to internal fixation with tension band do not need external fixation with plaster of paris, so it facilitates early knee joint exercise and rehabilitation. The therapeutic efficacy is superior than the other two methods ($P < 0.05$). It requires accurate and fine manipulation during operation. As compared with stainless steel circular fixation, silk thread circular fixation bears the advantage of avoiding another operation for withdrawing of the wire, though their therapeutic effect was in similarity.

Key words Fracture of patella Internal fixation

(original article page 5)

Clinical observation and animal experimental study on influence of electric effect in

bone remodelling

Academy of Science, Hubei Province (050081)

There is different explanation for the mechanism of the influence of electric effect in bone remodelling. Experimental study was carried on in observation of magnetic field in the influence of bone healing and electric current in bone remodelling. Through clinical observation and animal experiment, it indicates that electric effect can influence bone remodelling and promote bone healing.

Key words Electric effect Bone Bone remodelling

(original article page 8)

Transplantation of medial head of gastrocnemius muscle in treating old injury of posterior cruciate ligament

Guangdong Hospital of TCM, Guangdong College of TCM(510120)

since 1991, five cases (2 moderate instability, 3 severe instability) of old traumatic posterior cruciate ligament injury were treated with medial 1/3 to 1/2 of medial head of gastrocnemius muscle of the same side. Marked improvement of function (walking, quick working, going upstairs and downstairs, no instability) was found postoperatively, except there was a little bit sensation of instability (during rapid turning round or rapid stopping).

Key words Disposition of gastrocnemius muscle posterior cruciate ligament Injury of knee surgical operation Joint ligament

(original article page 10)

Treatment of avulsion fracture of tibial spine Luoyang Railway Hospital, Hunan province(471002)

In this article, 8 cases with an average of 14 years of age suffering avulsion fracture of tibial spine were reported. they were classified into 3 types, two of them were treated with conservative therapy; 6 of them, internal fixation with steel wire. Bony healing nearly normal joint function and satisfactory results were found in

all of these 8 followup cases. Classification and method of operation were introduced. Advantage of the operation, early diagnosis and mechanism of injury were discussed.

Key words Tibia Fracture peration
(original article page 11)

Improved Stimson's method in treating hip joint dislocation

Second College of Medical Science, Xi'an University of Medical Science(710004)

Seventy four cases of traumatic posterior dislocation of hip joint were reported in this article. Satisfactory clinical results were obtained after treatment with self--designed modified stimson manore duction. Method of reduction was introduced in detail, advantage of it was discussed.

Key words Traumatic posterior dislocation of hip joint Modified stimson's method
(original article page 12)

Characteristics of protrusion of L5S1 intervertebral disc (An analysis of 86 cases with symptoms and signs, myelogram, MRI, CT scanning

and operative findings)

General Hospital of Railway Construction Corporation of China(100043)

Eighty six operated cases of protrusion of lumbar intervertebral disc were reported. Among them, 29 cases (33.72%) were L5S1 level, next to L4, 5. The results show that the lower back pain in L5S1 level is more severe; for Laseque's sign, L5S1 level being $39.66^{\circ} \pm 18.46^{\circ}$; L4, 5, $49.90^{\circ} \pm 21.37^{\circ}$ ($P < 0.0284$). water soluble myelogram, MRI and CT scanning bear better diagnostic action though there were no difference statistically. But each examination bear their own benefit. There was significant difference between type and degree of two intervertebral disc space ($P < 0.013$, $P < 0.012$) being found in the operation. Lateral or extreme lateral position were found more in cases in level L5S1. It is realized that myelogram is the first choice, MRI or CT scanning should be added in doubtful cases. Lateral recess and nerve root canal should be carefully explored during operation.

Key words Protrusion of lumbar intervertebral disc L5S1 level
(original article page 29)

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主编 尚天裕

主办单位

中国中西医结合学会

中国中医研究院

承办单位

中国中医研究院骨伤科研究所

协办单位

凤阳门皇汉中医诊所

山西省介休市正骨专科医院

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