

学术探讨

老年股骨头置换后再手术临床分析

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摘要 自 1979 年 3 月至 1992 年 12 月,收治了 29 例股骨头置换术后失败的病例,均进行再次手术。认为头臼不称和假体松动是再次手术的主要原因,其次是假体断裂、感染和脱位等。提出了预防方法。

关键词 人工股骨头 股骨距 股骨颈干角 股骨前倾角

自 1979 年 3 月~1992 年 12 月,我们收治了因人工股骨头置换后疼痛的病人 29 人,根据不同情况分别予以再次或三次手术,取得较满意疗效,现进行分析报告。(见表 1、2)。再次手术距初次手术时间 7 天~8 年,平均 4.5 年。

临床资料

本组病例中男 13 例,女 16 例;第一次手术因创伤

表 1 再次手术原因

原因	头臼不称	假体折断	股骨劈裂假体至髓腔外	异物残留	骨吸收	骨增生	感染	再脱位
病例	9	3	2	1	10	1	1	2

表 2 再次手术方式

手术方式	人工股骨头	全髋	关节融合	闭孔神经内收肌切断	Colonna
病例	18	3	1	5	6

典型病例

徐×,女,71 岁,工人,住院号 290897,1992 年 6 月 18 日就诊。5 年前因右股骨颈骨折行人工股骨头置换术,术后即出现髋部疼痛,行走不便,术后 1 年余,疼痛加剧,不能行走,经诊断为股骨头头臼不称(人工股骨头过大)再行人工股骨头置换(改 44cm 为 42cm 股骨头),术后疼痛消失,关节活动自如。第二次术后 4 年,再度出现髋部疼痛,经摄片发现:人工股骨头柄部折断,近折端几乎穿破股骨外侧皮质。又行手术取出假体,改为髋关节重建术。术后疼痛明显好转,下肢活动改善,稍有跛行。随访 1 年余,无异常。

讨论

1. 假体柄部折断:假体柄部折断除了与假体设计及加工工艺有关外^[1],还与手术时安放假体的位置有关。假体颈部若能紧嵌于股骨距上,且适当使假体外翻,可以减小假体柄的应力^[2]。笔者认为,手术时适当多保留股骨距的长度,即可达到上述目的。选用 Moore 型股骨头时,要保留股骨距的长度不少于 1.3cm^[3]。若股骨距破坏,或保留过短,可致假体内翻,置换后颈干角小于 127°,从而增加了假体柄的应力,易使柄部折

断。由于每个患者的股骨颈干角及前倾角不尽相同,而假体的颈干角相对不变,在手术扩大髓腔时,可适当调整前倾角,适当多锉除大粗隆侧的骨质,可使假体外翻,从而减小了假体柄的受力,以保护假体柄部。因此,笔者认为,术前应常规拍摄健髓的正侧位片,了解健侧股骨的颈干角和前倾角,使置换后,患侧股骨的颈干角和前倾角尽量近乎健肢,以便恢复其生物力学作用。失败的 3 例颈干角均小于 127°,股骨距的长度小于 0.5cm。

2. 异常骨反应:假体置换后,在股骨的近端周围存在两种完全不同的骨反应,位于股骨干周围(尤以骨髓腔为甚)的反应以增生为主;大小粗隆部位(尤以股骨距附近为剧)以骨吸收为主^[4]。增生的骨反应利于维持假体的位置,而吸收的骨反应不利于维持假体的位置。引起骨增生的原因很多,机体存在低度感染、类风湿性关节炎及手术时大量血肿机化,都可引起增生,增生发生在大粗隆上方时,可引起髋关节活动时疼痛。因此,笔者主张采用后外侧切口可减少出血,并运用引流条,可减少增生。对老年患者来说,骨吸收则更为多发(尤其是陈旧性骨折患者)。小粗隆部位的骨吸收直接影响

假体,可引起假体松动、下沉。在术前及术后常规予以补充钙剂、维生素或补肝肾壮筋骨中药可减缓骨吸收的发生。术前及术后,在牵引状态下多作肢体功能活动,亦可改善患肢的血液循环,有助于预防骨吸收。此外,在手术显露小粗隆时,将小粗隆周围的软组织剥离太净,会使该部位骨质的血供下降,亦能加速骨吸收,应予避免。

3. 头臼不称:人工股骨头的直径必须同髌臼直径相符,才能确保术后髌关节功能。头臼相称,接触面积越大则越稳定。选择人工股骨头直径与患者自身股骨头直径相符或略小最为合适^[5]。取实体测量时,人工股骨头的直径可比患者自身股骨头直径小 4~6mm(因为在患者自身股骨头的表面覆盖有一层厚度约为 2~3mm 的关节软骨)。

4. 异物残留:髌臼及人工股骨头表面光滑,利于髌关节球窝面的对合,亦有助于髌关节活动灵活。若手术切除股骨距的碎骨块(骨质坚硬)留于髌臼内,使髌臼不平整,可引起疼痛。因此,在假体安放完毕,复位之前,应彻底清理髌臼及其周围,避免异物进入髌臼。

5. 人工股骨头置换对老年人来说是创伤较大的手术,除了常规的术前检查、备血等以外,伤肢牵引极为重要。陈旧性骨折,髌周挛缩更需解除,挛缩不解除,不仅增加了术中复位难度,即使强行复位后,也会使髌臼内压增加,引起疼痛。髌周挛缩亦能加速股骨距的坏死、吸收。

6. 手术操作和术后护理不当。

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肱骨外科颈骨折合并肩关节脱位 12 例治疗分析

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自 1983~1992 年,我院收治肱骨外科颈骨折合并肩关节脱位 12 例,现报告如下。

临床资料

12 例中男 5 例,女 7 例;年龄最小 4 岁,最大 90 岁;致伤原因:高处跌下 4 例,行走时跌伤 3 例,骑自行车跌伤 2 例,车祸 2 例,按摩 1 例;外科颈骨折情况:单纯性骨折 9 例,粉碎性骨折 3 例;左侧 6 例,右侧 6 例;肩关节脱位情况:肩胛盂下脱位 11 例,喙突下脱位 1 例;伤后就诊时间:当天 4 例,2~13 天 8 例;合并其它伤 2 例,1 例合并右 Colles 骨折,右股骨粗隆间骨折;1 例合并大结节撕脱性骨折及全身皮肤软组织挫伤。

治疗方法和效果

根据不同年龄及骨折脱位类型选择相应的治疗方法。其中 1 例 66 岁女性,伤后 13 天入院,经手法复位失败后行左肱骨头切除术;4 例年龄在 50~90 岁,在全麻下行手法复位加超肩石膏托固定;余 7 例行切开复位内固定(克氏针、骑缝钉、螺丝钉)加超肩石膏托固定,术后 X 线复查,复位满意。3~4 周后拆除外固定,开始行患肩的功能锻炼,并按下述标准评定结果。优:外展

上臂 120 度以上至正常;良:外展上臂达 90~120 度;可:外展上臂 45~90 度;差:外展上臂受限在 45 度内。12 例随访时间为 11 月到 10 年,其中优 4 例,良 6 例,可、差各 1 例。

讨论

1. 肱骨外科颈骨折合并肩关节脱位的发病率较低。损伤机理多为上肢外展,外旋跌倒时,以手或肘着地支撑体重,外力沿着肱骨纵轴传导,肱骨头向肩胛下肌与大圆肌之间的软弱部分冲击,将关节囊的前下部冲破致肩关节前脱位;当暴力继续沿着伤肢纵轴向上传递到结构薄弱的外科颈处,造成骨折。临床检查既有外科颈骨折的体征,又有方肩等关节脱位的特点。

2. 手法整复必须先将前脱位整复,再整复骨折端的移位。采用传统的外展 90 度牵引,甚至 180 度外展牵引是很危险的,因为可以很明显地伤及腋血管和神经,造成不可修复的损害。Hayes^[1]有过造成腋部大血管损伤严重后果的报道。因此要用轻巧牵引力顺肱骨方向稍外展牵引,另一助手用布单套过胸廓向健侧牵引,术者一手从腋窝以拇指推压脱位的肱骨头向上外,继续

Abstract of Original Articles

Observation of the rabbit tibial interfragmental gap in vivo by light guide fiber method

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In this article, changes of the healing process of rabbit tibial interfragmental gap treated with small splints and intramedullary nail fixation were observed. Through light guide fiber method, image pattern analysis measurements and radiographic analysis of the callus, the results showed that the mean value of fracture interfragmental gap decreased along with increasing of the time. There are also correlation between the tendency of changes of fracture and post-fracture time and burden of the limb ($p < 0.01$). Roentgenogram showed that the fractures were healed by the external bridge callus across the fracture site at sixth week. The results suggested that longitudinal displacement within $0.33 \pm 0.17 - 0.95 \pm 0.43$ mm of the experimental rabbit tibial fracture ends can facilitate bone healing.

Key words Fracture healing Fracture end gap Light guide fiber method Rabbit

Phagocytic function and heterogenicitic motive studies of surface wound healing

—Studies on the mechanism of Wei Nong Zhang Rou(2)

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Rabbit infected surface wound models were prepared. Wound exudation and surface wound cells were collected with modified Schilling stainless steel tube embedded in the hypoderm. The surface wound cells were stained with Wright-Giemsa stains. It was found that number of macrocytes(M) increased during process of the surface wound healing in external application of Chinese drug group, besides the wandering macrocytes were more than permanent ones. The differences were significant statistically. Through histochemical staining, there were very significant difference of the acid-phosphatase (AcP) and sugar metabolic rate-limiting succinate dehydrogenase (SDH) between surface wound healing and control group. It is suggested that external application of Chinese medicine can activate surface wound cells and elevate intracellular enzymic activity. It plays an important role in promoting surface wound healing.

Key words Surface wound healing Macrocytes Acid phosphatase Succinate dehydrogenase

A comparison between two kinds of internal fixation in treating fracture of patella

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Fifty-three cases of fracture of patella were treated with coarse silk thread cerclage internal fixation in 39 cases, and tension steel wire internal fixation in 14 cases. Three months postoperatively showed that the former was superior than the later. It is because in later group tail of the Kirschner pin brought a touching pain postoperatively, so recovery of the function was generally slower than the

former group. It is suggested that in the treatment of fracture of patellar the former method was first choice.

Key words Fracture of patellar Internal fixation of fracture Clinical study

Eighty-two cases of open tibio-fibular fracture treated with integration of traditional Chinese and modern medicine

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Better results were obtained in the treatment of **82** cases of open tibio-fibular fracture treated with integration of traditional Chinese and modern medicine. It is advised to let the open fracture becoming closed fracture after through debridement. During external fixation the patient kept in sitting position, let the affected limb hanging naturally in order to reduce the fracture ends in position correctly by means of gravity, then correct external fixation was applied instead of internal fixation. Application of drugs according to differentiation of symptom-complex in different stages and early functional exercises were emphasized.

Key words Fracture of tibia and fibula Integration of traditional Chinese and modern medicine

Compressive fracture of thoracic and lumbar vertebrae treated with buttock-shoulder style of training

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In this article, a kind of new functional exercise was introduced in the treatment of compressive fracture of thoracic and lumbar vertebrae. Twenty eight cases were treated. After a follow-up study of **3-41** months, satisfactory results were found in **24** cases. The characteristics of the exercise are small amplitude of movement, easy to be carried on, they were well accepted by middle and senile patients. The difference between the method and traditional therapy was introduced.

An analysis of reoperated cases following replacement of the femoral head in senile

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Twenty-nine reoperated cases following failure of replacement of the femoral head have been performed from March of **1979** to Feb. of **1992**. Regarding the main causes of **reoperation**, inappropriate between the head and acetabulum and loosening of the prosthesis; secondly **breaking** of prosthesis, infection and dislocation etc. were also mentioned. Prophylactic measures were suggested.

Key words Artificial femoral head Neck-shaft angle of the femur Anterior incline angle of the femur