



» 2013, Vol. 33 » Issue (11): 1097-1103 DOI: 10.3760/cma.j.issn.0253-2352.2013.11.005

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## AO微型联合重建接骨板内固定治疗髋臼后壁骨折

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## AO mini plate combined with reconstruction plate in the internal fixation of acetabular posterior wall fracture

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- 摘要
- 图/表
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**摘要** 目的 评价AO微型联合重建接骨板内固定治疗髋臼后壁骨折的近期疗效。方法 2009年1月至2013年7月,运用AO微型联合重建接骨板内固定治疗髋臼后壁骨折28例,男17例,女11例,年龄18岁~65岁,平均45.8岁。受伤至手术时间为2~16 d,平均6.8 d。入院后,髋关节脱位者,立即行脱位复位及股骨髁上或胫骨结节骨牵引,术前术后常规行骨盆正位及Judet斜位X线片,髋臼CT平扫和三维重建检查。手术采用Kocher-Langenbeck入路,术中尽量保护附着于小骨折块上的软组织,对关节面有压缩骨折尽量解剖复位,必要时植骨支撑。将微型接骨板剪切成合适长度固定骨折块,在将重建接骨板压于其表面交叉固定。术后采用改良Matta标准评定髋臼复位效果,改良Merle d'Aubigné和Postel评分系统评定患髋功能。结果 共28例患者,23例患者术后获得随访平均13个月,随访率为82.2%,5例外地患者术后12周因未到医院复查或电话变更而失访,失访率为17.8%。术后采用改良Matta复位标准评定髋臼复位效果:优22例,良4例,差2例,优良率为92.8%。术后6个月随访采用改良Merle d'Aubigné和Postel评分系统评定患髋功能:优15例,良5例,可2例,差1例,优良率为87.9%。1例发生股骨头坏死,3例术后18个月出现创伤性关节炎,2例患者术后6个月发现异位骨化,2例坐骨神经损伤术后3个月恢复。结论 AO微型联合重建接骨板可以对髋臼后壁骨折进行稳定可靠的内固定,能满足患者早期功能锻炼的要求,提供一种有效的内固定方法。

关键词: 髋臼 骨折 骨折固定术 内

**Abstract:** Objective To evaluate the recent clinical outcomes of fixing posterior acetabular wall fractures combining the AO mini plate with reconstruction plate. Methods From Jan 2009 to Jul 2013, 28 patients with posterior acetabular wall fracture were fixed by the AO mini-steel plate combined with reconstruction plate, including 17males and 11 females with the mean age of 45.8 years (range, 18-65). After admission, reduce the dislocation of hip joint immediately, and take femoral condyle or tibial tubercle traction. Preoperative and postoperative anteroposterior and Judet oblique radiographs, acetabular CT scan and three-dimensional reconstruction imaging were routine taken. Using Kocher-Langenbeck approach, intraoperative, try to protect the soft tissue attached on the small fragments, and reduct the fracture. Cutting the mini plate into proper length with reconstruction plate fix to its surface crossover. The functional outcomes were evaluated by the modified Merle d'Aubigné and Postel clinical grading system. The radiographs were graded according to the Matta/Judet criteria. Results Twenty-three patients are followed up 13 months (82.2%), and 5 cases lost in 12 weeks (17.8%). By the Matta/Judet criteria, 22 cases achieved excellent reduction, 4 good reduction and two fair reduction, with a good and excellent rate of 92.8%. By the modified Merle d'Aubigné and Postel criteria, functional recovery of the affected hip six month post-operation was rated as excellent in 15 cases, good in 5 cases, fair in 2 cases and poor in one case. with a good and excellent rate of 87.9%. One case occurred femoral head necrosis. In 2 patients 2 years after surgery developed traumatic arthritis. Two patients had heterotopic ossification after six month operation. One patient with injury to the sciatic nerve recovered 3 months post-operation. Conclusion Using the AO mini plate combined with reconstruction plate can fix the acetabular posterior wall fractures stably. The technique meet the requirements of patients with early functional exercise, which provides an effective method of internal fixation.

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潘昌武,刘曦明,蔡贤华等. AO微型联合重建接骨板内固定治疗髌臼后壁骨折[J]. , 2013, 33(11): 1097-1103.

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- [1] Letournel E, Judet R. Fractures of the Acetabulum. 2nd ed. New York: Springer Verlag, 1993: 412-565.
- [2] Moed BR, Carr SE, Gruson KI, et al. Computed tomographic assessment of fractures of the posterior wall of the acetabulum after operative treatment. J Bone Joint Surg Am, 2003, 85(3): 512-522.
- [3] Matta JM. Fractures of the acetabulum: accuracy of reduction and clinical results in patients managed operatively within three weeks of the injury. J Bone Joint Surg Am, 1996, 78(11): 1632-1645.
- [4] Moed BR, Willson Carr SE, Watson JT. Results of operative treatment of fractures of the posterior wall of the acetabulum. J Bone Joint Surg Am, 2002, 84 (5): 752-758.
- [5] Jimenez ML, Tile M, Schenk RS. Total hip replacement after acetabular fracture. Orthop Clin North Am, 1997, 28(3): 435-446. 
- [6] Romness DW, Lewallen DG. Total hip arthroplasty after fracture of the acetabulum. Long-term results. J Bone Joint Surg Br, 1990, 72(5): 764 .
- [7] Weber M, Berry DJ, Harmsen WS. Total hip arthroplasty after operative treatment of an acetabular fracture. J Bone Joint Surg Am, 1998 (9): 1295-1305.
- [8] 王满宜. 骨盆与髌臼骨折值得注意的问题. 中华骨科杂志, 2011, 31(11): 1181-1182. 浏览
- [9] Im GI, Shin YW, Song YJ. Fractures to the posterior wall of the acetabulum managed with screws alone. J Trauma, 2005, 58(2): 300-303. 
- [10] Yu YH, Tseng IC, Su CY, et al. Modified technique of percutaneous posterior columnar screw insertion and neutralization plate for complex acetabular fractures. J Trauma, 2011, 71(1): 198-203. 
- [11] 张春才, 许硕贵, 王家林, 等. 髌臼骨折记忆合金三维内固定系统的设计与临床应用. 中华骨科杂志, 2002, 22(12): 709-713.
- [12] Richter H, Hutson JJ, Zych G. The use of spring plates in the internal fixation of acetabular fractures. J Orthop Trauma, 2004, 18(3): 175-179. 
- [13] 陈戈, 陈仲, 欧艺, 等. 弹性接骨板在粉碎性髌臼后壁骨折治疗中的应用. 中华创伤骨科杂志, 2012, 14(5): 381-384.
- [14] Ziran BH, Little JE, Kinney RC. The use of a T-plate as "spring plates" for small comminuted posterior wall fragments. J Orthop Trauma, 2011, 25(9): 574-576. 
- [15] 许猛, 张立海, 张里程, 等. 复杂髌臼骨折术中应用CT扫描的意义. 中华骨科杂志, 2011, 31(11): 1261-1265. 浏览
- [16] Mont MA, Marulanda GA, Jones LC, et al. Systematic analysis of classification systems for osteonecrosis of the femoral head. J Bone Joint Surg Am, 2006, 88 Suppl 3: 16-26.
- [17] Brooker AF, Bowerman JW, Robinson RA, et al. Ectopic ossification following total hip replacement. Incidence and a method of classification. J Bone Joint Surg Am, 1973, 55(8): 1629-1632.
- [18] Goulet JA, Rouleau JP, Mason DJ, et al. Comminuted fractures of the posterior wall of the acetabulum. A biomechanical evaluation of fixation methods. J Bone Joint Surg Am, 1994, 76(10): 1457-1463.
- [19] Marintschev I, Gras F, Schwarz CE, et al. Biomechanical comparison of different acetabular plate systems and constructs--the role of arthroscopic-assisted infra-acetabular screw placement and use of locking plates. Injury , 2012, 43(4): 470-474. 
- [1] 王翀妍, 单治, 陈欢欢, 苏优乐图, 刘军辉, 赵凤东, 范顺武. 椎基静脉孔与椎体内裂隙相通可能是后凸成形术骨水泥渗漏的危险因素[J]. 中华骨科杂志, 2014, 34(4): 373-379.
- [2] 李庆虎, 周东生, 杨永良, 李连欣, 王国栋, 王永会. 比较纱布填塞术与造影栓塞术治疗骨盆骨折大出血的效能[J]. 中华骨科杂志, 2014, 34(4): 425-430.
- [3] 李连欣, 王永会, 郝振海, 周东生, 刘健安. 切开复位内固定治疗耻骨联合浮动伤[J]. , 2014, 34(4): 436-440.
- [4] 伍凯, 黄建华, 林健, 王秋根. 超近端胫骨平台双髌骨折的临床特点及治疗策略[J]. 中华骨科杂志, 2014, 34(4): 441-447.

- [5] 陈龙,尹善青,郭晓山,洪建军,陈华,杨雷. 内倾型后踝骨折的诊断与治疗[J]. 中华骨科杂志, 2014, 34(4): 454-459.
- [6] 范宏斌,王臻,郭征,付军,吴志钢,陈国景,栗向东,李靖. 经“Y”型软骨截骨髓白挽救术治疗儿童和青少年Type II型骨盆尤文肉瘤[J]. , 2014, 34(4): 460-461.