



## 距骨合并同侧跟骨骨折的临床特征及疗效分析

何锦泉,马信龙,马宝通,辛景义

300211 天津市天津医院创伤骨科

## Clinical characteristics and outcomes of ipsilateral talar and calcaneal fractures

HE Jin-quan, MA Xin-long, MA Bao-tong, XIN Jing-yi

Department of Orthopaedics, Tianjin Hospital, Tianjin 300211, China

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**摘要** 目的 探讨距骨合并同侧跟骨骨折的临床特征及治疗效果。方法 2003年4月至2011年7月收治距骨合并同侧跟骨骨折患者22例,男20例,女2例;年龄17~51岁,平均30.2岁;右侧12例,左侧10例。致伤原因:高处坠落伤13例,交通事故伤5例,重物砸伤4例。距骨颈骨折8例: Hawkins分型 I 型3例、II型3例、III型2例;距骨体骨折14例: Sneppen分型 II型6例、III型2例、V型6例。跟骨关节外骨折13例: 跟骨前突骨折5例、跟骨结节骨折2例、载距突骨折3例、跟骨体骨折3例;关节内骨折9例: Essex-Lopresti分型塌陷骨折7例、舌形骨折2例。开放性骨折4例, Gustilo和Anderson分型 I型1例、II型2例、IIIA型1例。开放性骨折于伤后平均5.5 h手术,闭合性骨折于伤后平均第11天手术。采用内固定手术治疗17例,非手术治疗5例。结果 22例均获得随访,随访时间25~89个月,平均41.5个月。2例(11.8%, 2/17)出现切口皮缘坏死,1例(5.9%, 1/17)伤口感染,无复位丢失及骨折不愈合病例。末次随访时,美国足与踝关节协会踝与后足功能评分为53~95分,平均78.9分;优5例、良10例、可7例,优良率68.2%(15/22)。1例非手术治疗患者(20.0%, 1/5)发生距骨缺血性坏死。手术治疗患者中12例(70.6%, 12/17)出现创伤性关节炎,累及距下关节者5例(29.4%, 5/17)、胫距和距下关节者7例(41.2%, 7/17),1例(5.9%, 1/17)行距下关节融合术。结论 距骨合并同侧跟骨骨折的受伤机制复杂,骨折类型多样。治疗骨折时应注意恢复解剖对位。创伤性关节炎是此类损伤最为常见的并发症。

关键词: 距骨 跟骨 骨折 骨折固定术 内

**Abstract:** Objective To investigate the clinical characteristics and outcomes of ipsilateral talar and calcaneal fractures. Methods From April 2003 to July 2011, 22 patients with ipsilateral talar and calcaneal fractures were treated in our hospital. There were 20 males and 2 females with an average age of 30.2 years (range, 17 to 51 years). The fractures occurred on the left side in 10 patients and on the right side in 12 patients. There were 8 cases of talar neck fracture, including 3 type I, 3 type II and 2 type III according to the Hawkins classification; there were 14 cases of talar body fracture, including 6 type II, 2 type III and 6 type V according to the Sneppen classification. There were 13 cases of extra-articular calcaneal fracture and 9 cases of intra-articular fracture. Four patients had open fractures, including 1 type I, 2 type II and 1 type IIIA according to the Gustilo-Anderson classification. The average time from injury to surgery was 5.5 hours for patients with open fracture and 11 days for patients with close fracture. Seventeen patients underwent internal fixation and 5 patients underwent non-operative treatment. Results All patients were followed up for 25 to 89 months (average, 41.5 months). Skin necrosis of the edges of the incision was found in 2 cases and wound infection in 1 case. No fracture nonunion and loss of reduction were observed in all patients. At final follow-up, the functional results were assessed according to the AOFAS score, and the average AOFAS score was 78.9 (range, 53 to 95). The result was excellent in 5 patients, good in 10 and fair in 7, and the overall excellent or good rate was 68.2%. Traumatic arthritis was found in 12 patients who had undergone surgical treatment, including 5 cases in subtalar joint and 7 cases in ankle and subtalar joint. Diaz disease occurred in 1 patient who had undergone non-operative treatment. Conclusion Ipsilateral talar and calcaneal fracture is a complicated injury which has many fracture types. The fractures should be reduced anatomically, and traumatic arthritis is the most common complication.

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