

SCIENTIFIC PAPER

Modified Dimon-Hughston Osteotomy for Unstable Pertrochanteric Fractures in Geriatric Patients

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ABSTRACT

Objective: To evaluate the performance of modified Dimon-Hughston osteotomy using a dynamic hip screw as the fixation implant among geriatric patients.

Patients and Methods: This study focused on patients who presented to the Department of Orthopaedics and Traumatology at the North District Hospital from July 2001 to June 2003 with unstable pertrochanteric fractures (Kyle type 3 and 4 intertrochanteric fracture or Seinsheimer type 4 or 5 subtrochanteric fracture). These fractures were managed by modified Dimon-Hughston osteotomy with a 135° dynamic hip screw. Patients' characteristics, operative blood loss, operation time, and radiographic findings were recorded.

Results: All 29 patients (mean age, 82 years) were able to perform full weight-bearing walking after the operation. The mean time needed to achieve union was 10.6 weeks. One patient experienced hip screw cut-out and 1 patient developed deep vein thrombosis. The 2 mortalities that occurred were not related to the operation: 1 patient died of a cerebrovascular accident 12 months after the operation and 1 patient died of respiratory failure 3 months after the operation. The mean follow-up duration was 26 months.

Conclusion: For the geriatric patients in this study, modified Dimon-Hughston osteotomy for unstable pertrochanteric fractures provided immediate stability for early weight-bearing.

Key Words: Aged, Bone screws, Hip fractures, Osteotomy

中文摘要

外翻股骨截骨術對老年病者之不穩定粗隆間骨折的處理

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作者從2001年7月至2003年6月間對29個，平均年齡為82歲，患有不穩定的粗隆間骨折(Kyle分類法的第3或4類骨折或Seincheimer的第4或5類骨折作定義)的病人進行外翻外翻股骨截骨術。作者用135度動力髖部螺絲為植入固定。在術後康復期間，所有病人均用全身重量的走路姿勢。平均癒合的時間為10個星期。27個病人可以接受最後評估；平均跟進時間為26個月(13至36個月)。發生之併發症包括有一位病者股骨頭位置之螺絲往上移和一位出現下肢靜脈栓塞。另有2位病非因是項手術致死。研究發現外翻股骨截骨術能夠提供即時的穩定作用，容許患有不穩定的粗隆間骨折的老年病者立在術後後仍然可以放全體重於患肢，而不會增加出現機械性失敗的機會。

INTRODUCTION

Pertrochanteric fractures are common among the elderly population. Internal fixation with a dynamic hip

screw (DHS) or dynamic condylar screw is a widely accepted method of management. In the English-language literature, the cut-out rate of the lag screw

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