Assessment of Periprosthetic Femoral Shaft Fractures Fixed with the Wire-Mount Cable-plate System

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ABSTRACT
Objective: To describe the Pamela Youde Nethersole Eastern Hospital experience of using the Wire-Mount cable-plate system (Synthes, Paoli, USA).
Patients and Methods: Five geriatric patients who were admitted between December 2002 and July 2003 for a fracture in or around an implant in the femur were retrospectively studied. The fractures were classified according to the Vancouver system, and the operating surgeon documented whether there was satisfactory fracture stability after open reduction and internal fixation with the Wire-Mount cable-plate system.
Results: The mean age at the time of fixation was 84 years (range, 74 to 90 years). The fractures were around internal fixation devices and hemiarthroplasty implants. Four fractures were at the tip or within one-third of the implant length; one was well beyond the tip of the prosthesis. The combined use of cable, wires, and screws provided adequate immediate fracture stability and allowed early mobilisation. Fracture union was achieved clinically and radiologically for 4 patients without complications. One of these patients was able to walk with the aid of a cane on discharge, whereas the other 3 were confined to a wheelchair because of general ill health before their operation.
Conclusion: The Wire-Mount cable-plate system is a versatile and cost-effective cable-plate system and should be considered in the treatment plans of patients with difficult periprosthetic fractures.

Key Words: Aged, Arthroplasty, replacement, hip, Bone plates, Femoral fractures/surgery, Post-operative complications

中文摘要
利用Wire-Mount處理“股骨折修復後的再度骨折”之成效
任世傑、高兆祺、高拔萃

對骨科醫生而言，處理“股骨折修復後的再度骨折”是一項艱巨及富挑戰性的工作。其中可用的方法包括保守性治療或外科固定手術。本文分析了5位從2002年12月至2003年7月入院之病者，其平均年齡為84歲。所有骨折均為位於股骨現有的內固定裝置或於關節置換裝置附近。我們均利用Wire-Mount作為固定骨折之工具，4位病者復康情況理想。另外文中更會提供一些技巧，以協助Wire-Mount之應用。

INTRODUCTION
The treatment of periprosthetic femoral fractures is difficult, but various treatment modalities are available. Conservative means include immobilisation with a spica cast and skeletal traction. Surgical techniques that are currently in use include intramedullary fixation; Ogden and Mennen plate fixation; compression plating with unicortical screws, cerclage wires, or a combination of the 2 modalities; and allograft struts fixed with cerclage wires. Several cable-plate systems are also commercially available, such as the Dall-Miles (Howmedica, Rutherford, USA) and Cable-Ready (Zimmer, Warsaw, USA) systems. Each system has its own merits and limitations. A combination of internal