

Original Article

A Comparative Study of the Postoperative Morbidity and Mortality in Femoral Neck Fractures in Elderly Patients Treated With Cemented and Uncemented Thompson Hemiarthroplasty

在年老病人患有股頸骨折，於應用骨水泥和沒有應用骨水泥鞏固的湯普森 (Thompson) 半髖關節置換術的療治中，其手術後的發病率和死亡率之一個比較研究。

Gowtham Kankanala, Deepak Gubbi Shivarathre, Prasad Pidikiti

Abstract

Background: Thompson hip hemiarthroplasty is a well-established procedure for the treatment of displaced intracapsular fracture neck of femur in the elderly. However, considerable debate exists regarding the use of cemented prosthesis in this elderly group of patients. The main purpose of our study was to analyse the outcomes following cemented and uncemented Thompson hemiarthroplasty of the hip with particular reference to cement-related morbidity and 30-day mortality.

Methods: Of the 110 patients who underwent Thompson hemiarthroplasty for intracapsular hip fracture, 30 (27.3%) had cemented and 80 (72.7%) had uncemented prosthesis. The mean age was 83.2 years with 87 female patients. The thigh pain and mobility at discharge, the inpatient complications and the 30-day mortality rates were compared between the cemented and uncemented groups.

Results: The study revealed no statistically significant differences in any of the postoperative outcome measures between the two groups.

Conclusion: Cemented and uncemented Thompson hip hemiarthroplasty have similar outcomes at discharge. Patients who underwent cementation without pressurisation did not show any higher incidence of bone cement implantation syndrome compared to their uncemented counterparts. Uncemented Thompson hemiarthroplasty can be an option in patients with very poor cardiopulmonary reserve without any significant complications in the short term.

中文摘要

背景: 湯普森半髖關節置換術在老年病人的移位性囊內股頸骨折是一個已為大家接受治療方案。可是在應用骨水泥鞏固植入物上仍然有很大爭論，我們的研究之主要目的是分析應用骨水泥和不應用骨水泥的湯普森關半髖關節的骨水泥關聯之發病率和 30 天死亡率。

方法: 在 110 位病人患有囊內股頸骨折以湯普森半髖關節置換術治療中，30(27.3%) 人有應用骨水泥和 80(72.7%) 人沒有應用骨水泥鞏固植入物的兩個組別。總平均的年齡是 83.2 歲，其中 87 位是女病人。隨訪並比較兩組手術後住院時的大腿痛，活動能力和併發症包括 30 天的死亡率。

結果: 研究顯示兩組手術後的結果，沒有顯著的統計學上差別。

結論: 基於我們的研究結果，使用骨水泥鞏固湯普森半髖關節植入物和不使用骨水的結果相約。應用沒有加壓的骨水泥鞏固湯普森半髖關節植入物時，其骨水泥關聯的併發症發生率沒有增加。所以沒有加壓的骨水泥鞏固湯普森半髖關節植入物在一些病人術前的活動能力及心肺功能儲備不良時是一個選擇，其短期的發病率和死亡率很低。

Keywords: *cemented, hemiarthroplasty, mortality, Thompson*