

Global Spine J 2012; 02(03): 137-142

DOI: 10.1055/s-0032-1326948

### Radiation Therapy without Surgery for Spinal Metastases: Clinical Outcome and Prognostic Factors Analysis for Pain Control

The purpose of radiation therapy (RT) for patients with spinal metastases is pain relief and control of paralysis. The aim of the present study was to assess pain relief using RT and to evaluate prognostic factors for pain control. We evaluated 97 consecutive patients, of mean age 62.7 years (range 28 to 86), with spinal metastases that had been treated by RT. We evaluated the effects of RT using pain level assessed using a drug grading scale based on the World Health Organization standards. The following potential prognostic factors for pain control of RT were evaluated using multivariate logistic regression analysis: age, gender, tumor type, performance status (PS), number of spinal metastases, and a history of chemotherapy. Among the 97 patients who underwent RT for pain relief, 68 patients (70.1%) presented with pain reduction. PS (odds ratio: 1.931; 95% confidence interval: 1.244 to 2.980) was revealed by multivariate logistic regression analysis to be the most important prognostic factor for pain control using RT. In conclusion, we found that RT was more effective for patients with spinal metastases while they maintained their PS.

在沒有手術情況下，只以放射性治療醫治轉移性脊髓腫瘤：臨床療效和控制疼痛的預後因素分析

對於轉移性脊髓腫瘤病人，放射性治療（RT）的目的是緩解疼痛和控制癱瘓。本研究的目的是評估以放射性治療（RT）緩解疼痛和評估控制疼痛的預後因素。我們評估了 97 位患者，平均年齡 62.7 歲（範圍是 28 至 86 歲）及曾接放射性治療（RT）醫治轉移性脊髓腫瘤。我們根據世界衛生組織標準的藥物分級等級來以疼痛程度評估放射性治療的影響。對於以放射性治療（RT）控制疼痛，以下潛在影響預後因素以多邏輯斯迴歸分析進行了評估：年齡，性別，腫瘤的類型，體能狀態（PS），轉移性脊髓腫瘤的數量和化療的歷史。在以放射性治療緩解疼痛的 97 位患者中，68 位（70.1%）的疼痛減輕了。體能狀態（PS）（勝算比：1.931，95%信賴區間區間：1.244 至 2.980），多邏輯斯迴歸分析顯示，對於以放射性治療控制疼痛，這是最重要的預後因素。結論是我們發現放射性治療（RT）對轉移性脊髓腫瘤患者更有效，同時亦能維持他們的體能狀態（PS）。